**The Ministry of Education of**

**Azerbaijan Republic**

**Azerbaijan State Economic University**

**Economic Impact of Tourism:**

**Types of Economic Analyses**

**Student: Gunay Akhundzada**

**Thesis Advisor: Garanfil F. Sadigova**





JUNE 2019

**Acknowledgement**

First of all, I would like to express my deep gratitude to my thesis advisor Garanfil Sadigova. I am deeply appreciative to my thesis advisor for assisting me fulfil graduating from the State Economic University of Azerbaijan. I am owed to her that in this challenging and responsible work of mine she has always been a good supporter.

I would also like to mention to give me constant guidance and genuinely informative support through this thesis writing process. I would also like to express my dear dean Aida Guliyeva's greatest appreciation. She always supported all her students in doing great things.

I am also particularly grateful for helping the dean's office and his helpful staff. They have always responded when I have questions about the rules and requirements for this paper to be completed. I am also especially grateful to my family for their aspiring guidance, friendly advice, during the work of the project. I am deeply grateful to my groupmates and friends for sharing their enlightening opinions on a number of subjects concerning this project as well.

**Abstract**

This paper introduces a methodology for measuring tourism's contribution to the growth of an economy that is tested for all over the world. We use the expansion of real GDP per capita as an indicator of economic growth and disaggregate it into economic expansion generated by tourism and growth in the economy generated by other industries. The methodology is contrasted with other existing approaches such as Tourism Satellite Account, Multiplier effect and econometric economic growth modelling.

**Keywords:**[tourism economics](https://journals.sagepub.com/keyword/Tourism+Economics), [tourism statistics](https://journals.sagepub.com/keyword/Tourism+Statistics), [economic impact of tourism](https://journals.sagepub.com/keyword/Economic+Impact+Of+Tourism), [tourism contribution to economic growth](https://journals.sagepub.com/keyword/Tourism+Contribution+To+Economic+Growth)

**Table of contests**

Acknowledgment ………………………………………………………...2

Abstract…………………………………………………………………...3

Table of Contests…………………………………………………………4

**1. INTRODUCTION………………………………………………..5**

1.1 Background………………………………………………….

1.2 Research aim ……………...………………………………....

1.3 Research Methodology……………………………………....

1.4 Literature Review……………………………………………

**2. ECONOMIC IMPACTS OF TOURISM…………………….…6**

2.1 Importance of Tourism Industry …………………………..7

2.2 The Distinct Location of Tourism in Poverty Alleviation…8

2.3 Tourism and Tax Earnings………………………………..10

2.4 Impacts of Tourism on Growth, Employment, Income &Livelihoods……………………………………….…….12

2.5 Income Distribution in Government Sector………………20

2.6 Impacts of Tourism on Gender……………………………23

2.7 Impacts of Tourism on the Environment………………….25

**3. OVERVIEW AND TYPES OF ECONOMIC ANALYSIS…..27**

3.1 Tourism Satellite Account………………………………..28

3.2 Input-Output Model………………………………………33

3.3 Types of Economic Analysis……………………………..36

3.4 Economic Impact Assessment Address…………………..40

3.4.1 Examples of Tourism Economic Impact Studies…..42

3.5 Multiplier Effects of Tourism in Economy………………43

3.6 Measuring Methods of Tourism’s Economic Impacts……44

3.7 The Design of Tourism Economic Impact Study………….45

**4. CONCLUSION………………………………………………...55**

**5. REFERENCES………………………………………………...58**

# INTRODUCTION

Tourism is traveling for relaxation, business, refreshment, family and spiritual purposes, usually for a limited period. It relates primarily to international travel, but can also bring up traveling within the same country or outside the state. Tourism has turned out to be a prevalent relaxation activity internationally. It can be local or global and multi-country tourism has both inbound and outbound, touching both the source economy and host states, and demonstrating a dynamic importance in a few circumstances.

It is basically a group of events, facilities or even businesses that carry a travel experience which involves accommodation, the establishment of production and consumption, conveyance, hospitality services, facilities providing entertainment and various activities for those locals or groups moving away from home. The World Tourism Organization (WTO) reports that tourism is now called the world's largest industry with annual revenue of over $3 trillion.

Tourism activity in different countries is the most significant reflection of creation regarding financial and social characteristics. Tourism is an outstanding facilitator for economic growth, that is why it is a vital part of the macroeconomic level.

Tourism's economic position fluctuates from place to place, but it can be understood to play a significant role in numerous countries' wealth. More economically developed countries (MECs) benefit tremendously from tourism in terms of total wealth produced, even when the percentage of GDP generated by tourism is small. Lower developed countries (LEDCs) are inconstant in their participation in tourism, however, most perceive tourist industry as both a general terms significant way of receiving money into their states. Some LEDCs depend on tourism and can produce more than 50 percent of GDP, other than distributing primary products such as food items or synthetic products such as clothing. This can be challenging as terrorism and natural tragedies could put individuals on holidays that would band away a massive portion of a country's revenue.

Tourism is one of the strong global operators of employment and wealth. Improving poverty is one of the ultimate global challenges. Despite tumultuous times for the world's recession, these simple facts are unlikely to change. If we focus on wealth creating tourism strength for citizens most need, it is an enormous challenge and opportunities.

This research’s aim is to show that how tourism effects to economy in all negative and positive sides. So, I want to emphasize tourism is one of the biggest sectors in the world which effects to economy in different ways. I gave a brief explanation of tourism’s influence to each sector. Such as income, gender, environment, poverty allocation and so on. Also, to talk about economic analysis is the main purpose of this thesis because, I want to show how tourism effects to economy in a macroeconomic view.

As research methodology, we used to analyse method. This method consists of economic analysis and explained in third chapter

In this research, we separated into three chapter. First chapter involve introduction of this paper. In second chapter, I talked about importance of tourism, it’s main impacts to economy, such as, negative, positive and induced effects. In addition, I touched other effects too, such as, impacts of tourism on gender, environment, income, distribution on GDP and so on. In second one, I showed economic analysis and some cases from the world. Also, I gave brief explanation of Tourism Satellite Account and Multiplier Effect of Tourism.

I used many sources in this research paper. First of all, I used some articles about economic impact of tourism and then, used World Tourism Organization’s analysis and graphics. Also, I collected some significant information from a handbook for professionals about tourism economic impact.

**CHAPTER 2. ECONOMIC IMPACT OF TOURISM**

**2.1 Importance of tourism industry**

**Sources of foreign exchange incomes of the Tourism industry is the key successful sort of business globally.**

**Employment opportunities-this industry is also one of the major segments. It offers services for inexperienced, preceding and experienced manpower. Director, labour, and many more individuals or efforts required in the tourism industry.**

**Sources of both public and private income-Tourism industry is the main cause of public income along with government sales tax, service tax, and charges tax, and so on. recognized as government revenue is community revenue. Handicraft, the arts, and many more. are the things that fascinate tourists, and most of them buy them, and the seller makes some profit that is called private earnings.**

**Cultural exchanges -Tourism business accommodates tourist social interchange bringing in several ethnic perceptions of other states wherever they visit. Native people can pick up their linguistic, abilities, talent, traditions, and vice versa. Tourism is one of the most essential features for developing states. Both local and international tourism must be measured to estimate the budgetary impact of tourism.**

**To the mass section area tourism offers a foundation for rising travel as an export industry, which reflects that the level of the region's financial activities will rise over the transaction of goods and facilities to travellers. Tourism is also accountable for foreign exchange without distributing anything from the state and provides the nation with more even earnings than any other business. Tourism can also increase export-related earnings along with the economic advancement ratio. Profits in earnings related to foreign exchange from unobserved exports that are useful in compensating the loss, if any, that the nation may have from a noticeable export.**

**This stability in outputs can also be defined as "a declaration of income and expenditure on world financial records."**

**Universal interpretation expenditure and income are in three categories:**

* **Observable job stability (including the import and export of manufactured products and supplies).**
* **Unrecognizable items (including facilities such as shipping, transportation, banking, and insurance)**
* **Capital transfers**

**2.2 The distinct location of tourism in poverty alleviation**

* **The sector's growth and size: The sector's growth and size. In dozens of states, tourism becomes an instrument for improving foreign exchange earnings and the development of indirect and direct services. Tourism subsidizes 5 percent of the world's GDP. Six percent of the world's facilities trades are reported to be the fourth largest export region after chemicals, automotive and fuel products. For 235 million occupations or one in every job internationally, tourism is crucial.**
* **The virtual significance of tourism in developing countries: Tourism is the most conceivable and bearable option for economic expansion in many undeveloped and least developed regions, and the major cause of foreign exchange compensation and benefits in certain nations. Part of this income falls to different groups of civilization and, if tourism is achieved with a strong focus on reducing poverty, it can openly value the poorer groups over the service of indigenous people in tourism initiatives, properties and facilities delivered to tourists, or the functioning of community-based and small projects, and so on.**
* **Tourism's character: There are numerous characteristics of tourism as an action that points low-income states and poor societies surrounded by them as being primarily applicable. These consist of its response to particular resources: tourism resides on certain common structures of emerging countries, such as rich cultural heritage, warm temperatures, encouraging sceneries and rich ecosystems. These assets can be mainly superficial in country areas, which can have a digital progression for tourism while being hard in most other financial areas.**
* **Its accessibility to the poor: tourism is a somewhat labour-intensive area and is traditionally made up of micro and small projects. Several tourism actions are mainly appropriate for women, young people and underprivileged groups such as traditional minority residents. Various tourism businesses may be somewhat manageable to the poor as they need relatively few services and a little supposition. Various may also be part-time and used to compliment earnings from other actions.**
* **It's networking: through several different actions and efforts to mark the tourism commodity, which has an overwhelming and broadened supply chain, tourist spending can value a wide variety of regions such as cultivation, handicrafts, carriage, and other services. Further series of outlays by those groups of people whose salary is strengthened by the economic value of tourism.**
* **It's linking of consumers to producers: tourism, amazingly, is a work that carries the buyers to the suppliers. The interface in both tourists and impoverished societies can provide numerous ambiguous and detailed guidance. These can vary from improved responsivity of ecological, traditional and financial issues and principles together with common good from enhanced restricted assets in organisation.**

**2.3 Tourism and tax earnings**

**Nearly all states’ administration has consistently attached importance to monetary improvements in the tourism industry. Financial strategies and tax administration are responsible for significant profits from tourism industries and direct and indirect duties are imposed on various profit and financial actions practices.**

**Tourism is made up of a wide spectrum of economic effects. Tourists are subsidizing in a region for trade, income, employment, tax income and profits. The maximum impacts within the primary tourism sector are restaurants, fun fairs, housing or accommodation, retail trade as well as transportation. Tourism influences most parts of the economy, considering the secondary impacts. Tourism activity financial control analysis generally focuses on differences in trades, revenue, and services in a successive area of tourism actions.**

**Let’s look at the following case about tax earnings through tourism. According to Hall and Lew, a simple effect of tourism findings shows that if a particular area terrifies 100 surplus tourists each spend $100 per day which means $10,000 is the new outlay of such area per day. If it continued over a period of 100 days, the area would obtain a million dollars in fresh sales. These millions of dollars are then circulated in quantity to the restaurant, lodging, retail, as well as amusement regions as the tourist chooses to spend the $100.** **It may be quite possible that approximately 30 percent of the million dollars would flow out of the district to overcome the costs of the goods purchased by visitors that are not made in the local region that is only the mass margins for such items should generally be included as direct sales effects. There is $700,000 left behind in direct sales that could generate $350,000 in profits within the tourism industries and retain 20 direct tourism jobs. Tourism industries are income-intensive and labour intensive, analysing a high percentage of the profits into financial gain and sustained work.**

**The tourism industry, concurrently, buys goods and facilities from former industries and pays to its staff most of the $350,000 in revenue in terms of wages and salaries. This creates secondary financial effects in the state. The study forces the use of a 2.0 sales multiplier to specify that each dollar of direct sales produces an additional dollar in subservient sales in this field. With the help of multiplier effects, the $700,000 in direct sales yields $1.4 million in full sales. These subordinate sales generate surplus profits and employment, followed by a total sales impact on the region of $1.4 million, $650,000 in profits, and 35 jobs.**

**Whereas it was presumed that the numbers used here are actually representative of what one has to explore in a study of the financial impact of tourism. An additional research forces to realize which areas are obtained through secondary impacts and may classify changes in earnings and impacts of distinct and unique subdivisions of tourists (market sectors). The effects of tax on this outlay can also be evaluated by relating limited tax rates to the applicable changes in sales or profits. Instead of targeting visitor earnings, one could also assess the impacts of tourism-related production or government movement.**

**Tourism's Contribution to Economic Growth Analysis of the various records accepts that tourism, both universal and domestic, should be considered as an essential element of financial motivation programs, especially during times of financial crisis. It acts as a financial catalyst which means that tourism should be prominent in order to regain economic development because the trade flows produced by a strong tourism business require a significant impact on trade and customer insurance, as can be understood from the scale of the subsidiary financial consequences of tourism in the T20 nations.**

**2.4 Impacts of Tourism on Growth, Employment, Income & Livelihoods**

Tourism has direct, indirect and induced impacts on local economies, which can often be largely divergent between countries, based on the structure of the sector, but most importantly on how well-connected tourism activities are with the local economy. Greater linkages generally translate into higher levels of local economic activity (and growth), which tend to happen when tourism businesses supply their goods and services (including labour) locally while low levels of economic linkages occur when tourism businesses are Dependent on imports to supply their demands (including staff). The sector's overall effect is the sum of the effects direct, indirect and induced.

**Direct Impacts: Represents the GDP generated by tourism activities, including those hotels, travel agents, airlines and travel agencies, and also restaurants and other tourist-friendly activities.**

**Indirect impacts: impacts that increase as a result of the activities undertaken by the sector and are a function of three different factors:**

**1. Capital Investment in Tourism: Includes capital investment in all sectors directly involved in the tourism industry, as well as spending on tourism assets such as transportation or corporate accommodation in other sectors.**

**2. Government Spending for Tourism: government spending to endorse the tourism sector, which may include both state and local spending. Activities include the promotion of tourism, visitor services, administration, and so on.**

**3. Supply chain effects: these present the transaction by enterprises within the tourism sector of domestic goods and services as inputs to the production of their final outputs.**

**Induced Impacts: describes the wider contribution of tourism through the expenditure of those directly or indirectly employed by the tourism sector.**

**Table 1 (below) shows the different elements of tourism's direct, indirect and induced influence on an economy. The table highlights the different actions were undertaken at the three levels of impact, i.e. direct impacts will be accumulated through the activities of accommodation or tourism services, indirect contributions to tourism businesses through expenditure on food and beverage suppliers, while induced impacts will be the expenditure of people working in the tourism sector (or benefiting from it).**

***Table 1: Components of Direct, Indirect & Induced tourism contribution to GDP***

|  |  |  |
| --- | --- | --- |
| **Direct Contribution of Tourism** | **Industries** | • Accommodation Services  • Food & Beverage Services  • Retail Trade  • Transportation Services  • Cultural, Sports &Recreational Services |
| **Commodities** | • Accommodation  • Transportation  • Entertainment  • Attractions |
| **Source of spending** | • Resident’s Domestic Spending  • Business Domestic Travel Spending  • Visitor Exports  • Individual Government Tourism &  Travel Spending |
| **Indirect Contribution of Tourism** | | • Private tourism investment spending  • Government collective tourism spending  •Impact of Purchases from suppliers |
| **Induced Contribution of Tourism (spending of direct and indirect tourism employees)** | | • Food & Beverages  • Recreation  • Clothing  • Housing  • Household Goods |

Source: WTTC (2018)

The table does not consider other effects that can cross boundaries i.e. that can be induced directly, indirectly and depending on who pursues them. For instance, government taxes compensated by tourism companies will have a direct impact on the sector; indeed, taxes paid by tourism workers will have an impact. Likewise, in-country tourism spending will have both direct and indirect effects as money follows the supply chain of tourism.

Using examples at the sub-regional level (Table 2 below for South Asia in 2018) and at the regional level (Table 3 below) for the influence of tourism on the Gross Domestic Product (GDP), both direct and total, we can see that indirect impacts on GDP are, in almost all situations, twice as high as direct influence. This means that tourism is essential not only for its direct contributions but also potentially through its connections to other economic activities as well as some other sectors of the economy as the direct effects spill over into other efficient sectors.

***Table 2: Direct & Total GDP Contribution of Tourism in South Asia, 2018***

|  |  |  |
| --- | --- | --- |
| **Country** | **Direct Contribution of Tourism to GDP (%)** | **Total Contribution of Tourism to GDP (%)** |
| Bangladesh | 2.1 | 4.3 |
| India | 2.0 | 6.1 |
| Maldives | 47.7 | 94.0 |
| Nepal | 3.8 | 8.2 |
| Pakistan | 3.0 | 7.0 |
| Sri-Lanka | 3.9 | 9.3 |
| **Average** | 2.9 | 9.5 |

Globally (Table 3 below), the direct effect of tourism on GDP ranges from a 2.6 percent contribution to GDP (in both Sub-Saharan Africa and Northeast Asia) to 5.6 percent (in North Africa). Total GDP contribution varies from 6.4 percent in the Middle East to 13.9 percent in the Caribbean. What is exciting is that tourism's overall GDP impacts are (on average) nearly three times as large as direct impacts while the range is not particularly high, i.e. from a 2.2 multiple in North Africa to a 3.9 multiple in Oceania. This could be related to the depths of tourism connections in the economy, i.e. where links are larger, total impacts would also be larger.

***Table 3: Table 1: Direct and Total Effects of Tourism on GDP, 2018***

|  |  |  |  |
| --- | --- | --- | --- |
| **Regions** | **Direct Contribution of Tourism to GDP (%)** | **Total Contribution of Tourism to GDP (%)** | **Ratio of Total to Direct Impacts** |
| Caribbean | 4.3 | 13.9 | 3.2 |
| Europe | 3.0 | 8.6 | 2.9 |
| Latin America | 3.2 | 8.8 | 2.8 |
| Middle east | 2.4 | 6.4 | 2.7 |
| North Africa | 5.6 | 12.1 | 2.2 |
| North America | 2.7 | 8.4 | 3.1 |
| Northeast Asia | 2.6 | 8.5 | 3.3 |
| Oceania | 2.8 | 10.8 | 3.9 |
| South Asia | 2.9 | 9.5 | 3.3 |
| Southeast Asia | 5.0 | 12.2 | 2.4 |
| Sub-Saharan Africa | 2.6 | 6.9 | 2.7 |
| **Average** | 3.4 | 9.6 | 2.9 |

*Source: WTTC (2018)*

A study by Mitchell and Martins highlights case studies of strong links (i.e. Mauritius and Morocco) and weak links (Cape Verde & Seychelles). This kind of links are especially significant where tourism places offer high-value product lines as stronger links result in greater consequences. The data below recommend that regions such as Oceania may have higher connections maybe because of their remoteness and greater need for self-dependence (as transport costs are higher), while regions such as North Africa (where transport links are stronger) have weaker connections. Optionally, they could reflect the set-up of tourism businesses, so on, regions more dependent on all-expenses paid may have weaker links than regions where the tourism industry is more embedded into local areas.

WTTC data is lack of information on the indirect impact of tourism on growth. Vellas explains the relevance of these indirect impacts of tourism in T20 countries where the sector's indirect impacts account for 45 percent of tourism contributions to GDP. The analysis underlines that indirect impacts are stronger where national tourism is more prevalent as well as in countries. Vellas provides a breakdown of direct and indirect GDP tourism contributions (as well as total contributions) and shows that indirect contributions can range from around 1.6 percent (in India) to 6.9 percent (in Australia). The sector can, therefore, contribute to growth, supplied that there is an investment to support the sector (such as transport infrastructure, clean water, waste treatment). Steck describes that the direct impact of tourism affects the broader economy via six main channels:

* Workforce invention: tourism actions create employment via a number of opportunities, i.e. hotel staff, tour operators, cooks, so on
* Supply of Goods & Services: local or national businesses may provide tourism businesses with goods and services, also food or furniture, but these items could also be shipped if local supplies do not meet demand either in terms of cost, quality or quantity.
* Direct Sales of Goods & Services: Wholesalers in tourist destinations can sell their goods and services directly to tourists (i.e. souvenirs or food), directly seizing the monetary gains of tourist engagement.
* Establishment of tourism enterprises: high (or rising) levels of tourism activity can lead to the creation of new tourism companies, creating new job opportunities and so on.
* Tax & Levy Generation: Tourism companies contribute to economic output through taxes, while tourists can (and are often) be taxed directly, e.g. through visas, further making profits for national or local governments.
* Infrastructure investment: As the tourism sector extends its needs on local infrastructure, which in turn drives investment in infrastructure either through private entities or by the public sector.

Employment Turner & Sears states that the travel and tourism sector is a guiding great businessman worldwide, directly hiring more than 98 million people and presenting around 3 percent of total world employability, and indirectly creating one out of every 11 jobs. WTTC forecasts the overall contribution to employment (both direct and indirect) put the sector's contribution to around 266 million jobs.

An estimated 63 million additional jobs will be created in the sector between 2012 and 2022 (see table 4 below), the large number of which will be in Asia (approximately 40 million).

***Table 4: Estimated no. of Jobs Created in Tourism (by region) 2012 – 2022***

|  |  |
| --- | --- |
| **Region** | **Estimated Jobs Created** |
| Caribbean | 465,000 |
| Europe | 2,437,000 |
| Latin America | 4,513,000 |
| Middle East | 1,413,000 |
| North Africa | 1,689,000 |
| North America | 4,513,000 |
| North East Asia | 23,947,000 |
| South Asia | 9,820,000 |
| South East Asia | 7,348,000 |
| Oceania | 289,000 |
| Other | 6,580,000 |
| **Total** | **63,014,000** |

Source: Turner & Sears (2018)

Table 5 below demonstrates some examples of tourism effects on South Asia's direct and total employment. The data indicate that direct contributions range from 1.7 percent in Bangladesh to 44.3 percent in the Maldives, while total tourism employment (as well as for indirect employment) scales from 3.8 percent to 86.7 percent, so the effect can be important but can vary significantly between countries.

***Table 5: Direct, Indirect & Total Contribution to Employment for South Asia in 2018***

|  |  |  |
| --- | --- | --- |
| **Country** | **Direct Contribution of Tourism to Total Employment (%)** | **Total Contribution of Tourism to Total Employment (%)** |
| Bangladesh | 1.7 | 3.8 |
| India | 4.8 | 7.7 |
| Maldives | 44.3 | 86.7 |
| Nepal | 3.1 | 7.0 |
| Pakistan | 2.5 | 6.3 |
| Sri Lanka | 3.5 | 8.4 |
| **Average** | 10.0 | 20.0 |

Looking at employment statistics at regional level around the world (Table 6 below), we can see that even at the regional level there is a substantial range of direct and total employment impacts for the sector, i.e. directly accounting for between 2.3 percent of employment (in Sub-Saharan Africa) up to 10 percent (in South Asia). Total impacts may be considerable, i.e. 20 percent in South Asia (especially due to Mauritius) or 12.4 percent in Oceania and 11.3 percent in the Caribbean. Therefore, the data underlined tell that tourism can have some significant effects on employment.

The proportion of total jobs to direct jobs being created by the tourism sector underlines an interesting statistic, i.e. across all regions the ratio is nearly identical (with an average of 2.5 percent), as the range varies from a multiple of 2.0 (in South Asia) to 3.1 (in the Caribbean), thus the sector's overall employment effects are broadly similar across all regions. This may be because of the substantial higher inflexibility of labour moving across boundaries (unlike goods), which may mean that the tourism sector needs to source labour locally, making its total impact on jobs (relative to its direct impact) broadly identical across regions.

**2.5 Income distribution in Government sector**

There are limited statistical data in terms of impacts on earnings, i.e. unlike employment and GDP affects; there are no accurate cumulative data sets comparing tourism revenue. The practise of case study assessment is important to understand the effects of tourism. The data will not provide a comprehensive assessment of the effects of tourism on income, but it does offer a selective picture.

A study by the World Bank on the economic effect of tourism in Panama found that the tourism sector had a greater effect on income by far than all other areas in the country, i.e. employment in tourism would bring household income benefits than employment in other sectors. Lee & Kang (1998) explain that the tourism sector contributes to a progressive equal distribution of earnings and is more likely to increase the standard of living of people in lower incomes than employment in the services or manufacturing sector. The sector may also theoretically provide greater opportunities for income growth, i.e. where people join the tourism sector there appears to be higher upward flexibility in employment and wage skills than in other sectors.

Tourism seasonality may also play a role in the income distribution of the sector. Income inequality (within the sector) tends to decrease during peak tourism season, while income inequality tends to increase during low seasons (Fernandez-Morales, 2003). Where the tourism sector gives a greater range of products, income inequality tends to be lower than where the sectors offer more limited products (Fernandez-Morales, 2003). Research by Perez-Dacal2 (2012), on the other hand, argues that seasonality may not have such large impacts on tourism wages, but the specialization of tourism activities may clearly have a positive impact on salaries.

Some case examples on income distribution at tourism;

A study examining the effects of multiplier tourism (Horvath & Frechtling, 1999) demonstrates that tourism had complex effects on incomes through different countries, i.e. in Australia (in 1984), tourism had a 25 percent greater effect on incomes than in Turkey (in the same year), while in 1990, the effect of tourism on incomes in Bermuda was twice as large as in Samoa (also in 1990). This indicates that the impacts on income vary across countries.

In various forms of rural income and livelihoods, a study by Tanrivermis & Sanli (2007) on tourism in rural Turkey found that the sector accounted for about a quarter of average household income (26 per cent), while the large proportion of household income (73.5 per cent) was still due to agricultural activities undertaken through by the region's 3 inhabitants. Likewise, Jamaican tourism plays a major role in substituting the country's agricultural income (Oxford Economics, 2012).

A study by Shah & Gupta (2000) creates some statistical evidence on income, indicating that as the tourism sector of a region broadens, there are increased opportunities for households to benefit (i.e. supplement their income) from the sector across homestay projects, but as the sector continues to develop, these home-stay policies are often replaced by lodges and hotels and the effects on local income. Higher engagement leads to increased local income capture).

Income effects could also stretch beyond earnings, i.e. in rural Namibia, tourism income has managed to secure real assets such as livestock and agricultural tools or equity in group-based tourism activities (Ashley, 2000). In Botswana, participants of a local community-based tourism programme have been able to obtain housing, water supply, transportation but also school scholarships through their tourism activities.

Poverty rates also can be influenced by tourism, but these rely on the framework of the sector and its assimilation into the local economy, i.e. in Zanzibar, only 10 percent of tourism earnings go to poor people (as the sector relies mainly on imports). On the other hand, in Panama, local households are able to gain access 56 percent of local tourism income, while in Malaysia, although hotel owners capture a large share of tourism spending (28 percent) vis-à-vis local businesses that capture about 16 percent, local people can still capture about 34 percent of total tourism income (TPRG, 2009). In Costa Rica, tourism helps to reduce poverty rates by between 1.5% and 3%.

**2.6 Impacts of Tourism on Gender**

UNWTO (2018) discusses the effects of tourism on women. The report outlines a number of major findings that include:

* Women who make up a larger percentage of the formal tourism workforce. Women are well-represented in services and secretarial work, but have limited professional representation.
* Women typically earn 10 to 15 percent less than their male counterparts.
* Tourism has twice as many female employers compared to other sectors

Table 7 below underlines the regional employment rate of women worldwide, showing that women generally prefer to be more active in the tourism sector (within hotels and restaurants) in Latin America and Caribbean, even though reasonably high attendance in all other regions can also be seen. On average, women make up approximately half of the tourism workforce, thus in terms of raw numbers, conceptually there seems to be some complete equality within the sector. The studies are further justified by a 2018 WTTC study on tourism in five countries, which found that in 2018 the sector employed more women (and youth) in percentage to the national average in four of the five countries.

***Table 7: Women Hotel/Restaurant Employees by Region, 2018 (%)***

|  |  |
| --- | --- |
| **Region** | **Regional Average(%)** |
| Latin America | 58.5 |
| Caribbean | 55.4 |
| Africa | 47.0 |
| Oceania | 46.8 |
| Asia | 35.4 |
| **Average** | 48.62 |

Looking at the types of jobs that women tend to hold in the sector (Table 8 below), we can see that there is, in reality, a bias for women in clerical and service worker positions (i.e. cleaning staff) as opposed to more professional positions in the sector. This bias is evident across all regions (for which data are available) and averages explain that women tend to dominate the sector's clerical position roles (about 60% of the workforce).

***Table 8: Women employees by occupational status, 2018 (%)***

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **Professional** | **Clerk** | **Service Worker** |
| Latin America | 38.9 | 49.4 | 35.6 |
| Caribbean | 36.6 | 62.7 | 65.5 |
| Africa | 34.9 | 56.6 | 34.8 |
| Oceania | - | 67.4 | 42.9 |
| Asia | - | - | - |
| **Average** | 36.8 | 59.0 | 44.7 |

Comparing women's tourism employment with other sectors at the regional level, we can see that women's employment in the tourism sector appears to be proportionally higher than women's employment in other sectors (36.1% in tourism compared to 21.9% in other sectors). This indicates that tourism can be beneficial to women in terms of offering them job opportunities; however, as Table 8 (above) shows, the positions at their disposal tend to be mid-to-low.

In terms of salary, a study based in the United Kingdom (Jordan, 1997) found that women received lower wages in the tourism sector due to cultural issues, i.e. women were used in lower paid front desk jobs (i.e. as representatives of tour operators) as a way of selling tourism products to tourists, but were limited in their upward flexibility within tourism businesses (the study specifically looked at travel age). While the study is limited in scope and does not cover the sector's full breadth (or any regional variations), it offers an interesting note point.

**2.7 Impacts of Tourism on the Environment**

In addition to the impact of tourism on national and local economies, the impacts of the sector also have an environmental aspect to consider. UNEP emphasises three major environmental impact areas of tourism, i.e. natural resource depletion, pollution, and the physical impacts of tourism.

**Depletion of natural resources:** where tourism increases pressure on natural resources where they may already be abundant, with the use of water and local resource use.

**Water Resources:** Tourism companies overuse of water for tourism purposes, swimming pools, garden maintenance, etc. In dry areas, water use is especially worrying as tourists tend to consume twice as much water on vacation as they do at home (440 litres vs. 220 litres), while the amount of water used in a golf course is identical to 60,000 rural villagers in one year. In some famous resort areas in South Asia, drinking water is transferred from local villages and delivered to local hotels, leaving villagers to use water for only a few hours a day. Tourism water usage typically accounts for 5% of total national water usage, although it may be significantly higher in some countries, i.e. around 40% in Mauritius or 35% in Cyprus.

**Local Resources:** Tourism may increase the pressure on resources such as energy, food and raw materials. Increased use can have an impact on local populations, particularly in busy periods when there is a higher demand for resources. Tourism also has the potential to adversely affect biodiversity, particularly in coastal areas (such as coral reefs or coastal wetlands), rainforests, arid and semi-arid regions and mountainous areas. Hiking, overfishing, tourism resort construction, etc. can all make a contribution negatively to the ecosystems of these areas, which can have a negative effect on the attractiveness of these areas for tourism activities. Hiking tourists in Nepal, for instance, can use up to 5 kg of wood (each) per day during expeditions, compounding the already serious impacts of deforestation in Nepal.

**Pollution:** Tourism, like many other economic sectors, can contribute to pollution by air pollution, solid waste and wastewater.

**Air & Noise Pollution:** Increasing tourist numbers (and subsequent demand in demand for tourism travel) ensures that the sector is becoming an extremely important pollution source.

UNWTO also gives an overview of tourism greenhouse gasses, a result that shows that domestic tourism was actually a bigger contributor to greenhouse gas emissions than international tourism. Aviation transportation and accommodation account for a significant part of the emission process for both domestic and international tourism, while land transportation is the primary contributor to domestic tourism.

***Figure 1: Tourism Carbon Emissions by Destination***

**Chapter 3. Overview and Types of Macroeconomic Analysis**

It is usually understood that the growth of their economies is a primary policy primary goal of most national governments. A growing national economy is expanding output capable of meeting domestic and international demand. A growing economy provides occupants with more jobs and increased incomes. A growing national economy raises government revenues to finance resident services such as defence, education, police and fire protection, support for social welfare, infrastructure, and other useful services. In brief, a constantly increasing national economy increases residents and institutions choices that cause to an improvement in the value of life for everyone.

As a result, national governments are continuously implementing, monitoring, updating, and improving policies aimed at increasing national income, personal income, employment, and tax revenue. Notable among these policies are those intended to increase the nation's effective demand for transportation, hospitality, entertainment and recreation, retail and other services for tourists away from home. Such policies help to broaden aggregate demand and the national economy if profitable.

**3.1 The Tourism Satellite Account**

More than 60 countries have used the Tourism Satellite Account (TSA) to estimate the direct effects on their national economies of one specific type of aggregate demand–Tourism Consumption (UNWTO 2018). It is intended to be a unique method of measuring Tourism Consumption's direct economic contributions to a national economy. Its novel approach stems from the application of the principles and structure of the internationally adopted National Accounts System (SNA) to measure tourism's direct economic impact.

The TSA officially consists of a set of interrelated tables showing the size and distribution of the various forms of tourism consumption in a country and the direct contributions to GDP, national value-added, income, employment and other resulting national economy macroeconomic measures. TSAs are always related to a national area or economy and focus on calendar years under the commercially available framework, even though quarterly estimates are not unknown.

Here it is necessary to set some basic terminology involving different elements of "Tourism's economic impact." Unfortunately, presently there is no general agreement among those studying the tourism field on the terms adequate to explain these elements. In this paper, the following terms and meanings are used to foster consensus and facilitate debate of measuring the impact of tourism demand on the country economy or a sub-national region.

How the study of tourism impact analysis can continue without a set of commonly agreed and used definitions is difficult to speculate. Those provided here are entitled to adopt relevant terms from the Tourism Satellite Account or reflect a significant degree of common use:

* Total Tourism Internal Demand: as indicated by the TSA, the sum of Tourism Internal Consumption, Tourism Gross Fixed Capital Formation, and Tourism Collective Consumption in the country under study for a previous period, usually one year. For the sake of international comparability, UNWTO currently recommends limiting the measurement of Total Tourism Internal Demand to Tourism Consumption. The other two items that the concept covers–Tourism Fixed Capital Formation and Tourism Collective Consumption –can be added later.
* Tourism Economic Contribution: Total Tourism Internal Demand's direct, positive effects over the past period, usually one year, on a national economy. This involves the TSA measures of Tourism Direct Gross Value Added (TDGVA), Tourism Direct Gross Domestic Product (TDGDP), Tourism Industry Employment, Employee Compensation, Gross Operating Surplus of Business Companies, and Lower Government Taxes.
* Tourism Economic Benefits: Tourism Economic Contribution plus side effects (including both "indirect effects" and "induced effects") on the economy being studied for a previous period, usually one year.
* Internal Tourism Expenditure: as determined in the TSA, the amount paid by visitors to the economy or to the country under study for the takeover of consumer goods and services and valuables, for the own use of visitors or to distribute. It contains monetary spending on behalf of visitors by both visitors themselves and others. The latter includes monetary spending on business travel by employers and government and non-profit institutions serving households to subsidize visitors ' costs. Internal Tourism Expenditure consists of expenditure on inbound tourism and domestic tourism.
* Internal Tourism Consumption: as defined in the TSA, equals Internal Tourism Expenditure plus ascribed values of services offered to visitors (e.g., exchange of holiday homes, accommodation in holiday homes, food and accommodation provided to visitors by friends or relatives, free travel services provided by employers and government expenses to the benefit of visitors) This economic factor is the foundation for the Tourism Direct Gross Value Added (TDGVA) and Tourism Direct Gross Domestic Product compilation.
* Tourism Economic Impact: Total of an extended set of Tourism Consumption and other Total Tourism Internal Demand elements direct and secondary effects on the national economy. These can be demonstrated by disaggregated sets of households, productive activities and/or governments, and may be related to a period past or future.

The Tourism Satellite Account is the single most significant analytical tool built over the past several decades to estimate the demand for tourism and its direct effects on a national economy. The Tourism Satellite Account, or TSA, is a unique way of measuring Tourism Demand's direct economic contributions to a national economy. Its unique approach is based on the principles and structure of the globally adopted National Accounts System (SNA) to measure tourism's direct economic impact. The TSA consists of a set of interrelated tables showing the size and distribution of the various forms of tourism consumption in a country and the direct contributions to a national economy's GDP, employment and other macroeconomic measures.

The TSA is prepared in TSA: RMF, a manual authorized by the Statistics Division of the United Nations, the European Communities-Eurostat Commission, the World Tourism Organization and the Organization for Economic Co-operation and Development It is nourished by a national tourism statistics system detailed in IRTS.

Here it seems acceptable to mention that the TSA includes a wealth of statistics extracted from the National Accounts System of a nation and its tourism statistics system. These can be analysed in themselves to notify determinations of various kinds, like spending on tourism advancement and investment in visitor facilities or tourism-related infrastructure; assess the effects of public policies on tourism demand and supply; assess returns on tourism development investment; and evaluate initiatives to draw international visitors.

Ultimately, the TSA is intended to produce five "main aggregates" for a country that "provide summary predictors of tourism size".

These primary aggregates seem to be:

* Internal Tourism Expenditure–the amount paid by visitors to the economy or country being studied for the acquiring of consumer goods and services and valuables, for the own use of visitors or for giving away. It involves monetary spending on behalf of visitors by both visitors themselves and others;
* Internal Tourism Consumption–tourism consumption within a country of both resident and non-resident visitors;
* Gross Value Added from Tourism Industries (GVATI) Total of an extended set of Tourism Consumption and other Total Tourism Internal Demand elements direct and secondary impacts on the national economy. Tourism Direct Gross Added (TDGVA) – part of the gross added value created by the country's tourism industries and other industries that serve visitors directly in response to internal tourism consumption. This is allocated in the form of income, like labour compensation, interest, rents and profits, to production factors;
* Tourism Direct Gross Domestic Product (TDGDP) – the total amount of the parts of gross value added (at basic prices) generated by all industries in answer to domestic tourism consumption based on the amount of taxes fewer incentives on products and imports involved in the value of these expenses at buyers' prices.
* In addition to these major components of macroeconomic analysis, the TSA offers measures of other elements of Tourism Economic Contribution:
* Employment in the Tourism Industries (and, by extension, Tourism Employment;
* Labour compensation – wages and salaries paid to tourism employees plus benefits involved with those revenues;
* Gross operating surplus of business firms – designed to operate revenue of companies generated by Tourism Consumption;
* Government direct and indirect taxes generated by Tourism Consumption.

The National Accounts System says the following concerning its mission: To provide an extensive theoretical and accounting framework that can be used to develop a macroeconomic database appropriate for economic performance analysis and evaluation. The presence of such a database is a precondition for informed, rational policy making and decision-making.

It is vital to understand that the Tourism Satellite Account has been characterized for the same cause as a satellite to the National Accounts. It generates the accounting database for analysing the tourism sector's performance, and it does so with particular reference to a country's national economy. And it quite excellently full-fills these goals. In addition, its contribution to understanding a tourism sector can be broadened via several macroeconomic analytical tools profiled in this paper's balance.

**3.2 The input-output (I-O) model**

The first model formed years ago to evaluate the secondary impact of shocks on a national economy, tourism or otherwise is the input-output (I-O) model. The I-O model is based on an input-output table built from the supply and use tables from the national accounts system of a country. As explained by SNA (chapter 28), we can replace industries for the use table rows to produce an input-output table. This table introduces every industry in the country in the rows supplying inputs in the columns to every industry. Subsequently, it was called the "interindustry matrix" because it demonstrates the output flows from each industry to each industry in the country. It is a "strong accounting structure based on analysis".

We have used the Input-Output Table as an account so far. This account can be transformed into a very practical analytical tool, the Input-Output Model, with some evolutions. We begin the retouching exercise by computing another account from the input-output table, sometimes called the "Direct Requirements Table," by merely combining the ratio of the original value in the cell to the total for the entire column (i.e., industry) for each cell in the input-output table. The Direct Requirements table then displays the inputs directly needed from different supplier industries (in the rows) to produce one output unit for each purchasing industry (in the column). These ratios are officially called the "direct technical requirements coefficients" (Shaffer, Deller and Marcouiller).

By manipulating this Direct Requirements Table (called "matrix inversion"), we generate the "Total Requirements Table." At this level, we shifted from an account to a model, the "Input-Output (I-O) Model." This model characterizes the total amount of intermediate output required all across the economy for any sum of final consumption of the output of a given industry. The total amount of these outputs above and beyond the direct output to meet Tourism Demand all through the economy is named the Demand's "indirect effect," one of two types of secondary impact. We use the vector of Tourism Expenditure by industry presented by Table 4 of the TSA to analyse the consequences of Tourism Consumption in a country. This affords the direct plus indirect effects of this demand on the output of a country. In addition, we can calculate numerous multipliers by dividing the total transactions, output, value added, income or employment generated by the actual amount of Tourism Demand (Shaffer, Deller, and Marcouiller).

Up to this point, we have not perceived any increase in the final consumption of households earning income from inter-industry transactions. It is logical to assume that these households will spend the rest of the income they earn as a consequence of visitor spending on the outputs of the nation's industries. Narratively, this involves moving households from the Final Demand sector to the processing sector together with industries. These generates more interindustry transactions and household income, which to some extent identically cycle via the economy, producing more indirect and induced impact, including both. If we are willing to take part in separating the induced effects, we can simply eliminate the indirect Input-Output multiplier from the total multiplier including induced effects for the same dataset.

For the relevant year, an I-O model of a country can generate estimates of the output, income and employment multipliers for Tourism Demand. The most helpful form of these is the ratio of the final measure (output, income, added value, etc.) to the original tourism spending. This kind of multipliers can be contrasted to other types of consumer spending, like on automobiles and health care, government spending on military bases and other facilities, and investment in infrastructure construction and maintenance. This assists policymakers in deciding the complete effects of public policies on expanding tourism expenditure likened to alternative economic development programs.

In addition, the I-O Model can be used to determine the ex-post economic benefits of tourism spending connected to a given event. Here, in order to generate indirect, induced and total impacts, we extend the Tourism Expenditure variable by industry due primarily to the event to the I-O model. This tells discussions on how much government spending should be spent on promoting and initiating festivals, concerts, sporting events, and other entertainment activities.

In addition, the Input-Output Tables show connections between Tourism Industries generating for Tourism Expenditure and the industries supplying those industries with intermediate goods and services. For example, if a country discovers that its accommodation industry is buying a lot of its intermediate products from abroad (like those of furniture and equipment), it can boost the macroeconomic contribution of serving accommodation demand by inspiring domestic companies to produce these items. This will decrease the demand spillage to other countries ' industries and increase the multiplier impact of tourism investment in the country being studied.

At last, it is worth bearing in mind that I-O models continue to be popular today, 70 years after they have been established. The framework and data required for I-O models are well understood and widely accepted. There's no question how to build an I-O model: it's clarified in SNA. However, Archer (1977) marks the first extensive exhibition of I-O multipliers for tourism analysis, and studies continue to be released 35 years later using these techniques. Researchers and users can, therefore, be very assertive that the findings of I-O models are similar across nations.

Businesses and public institutions, at national, state and local level, are intensely interested in the economic effects of tourism. One routinely hears claims which tourism supports a number of jobs in an area, or that a festival or special event in a community has generated a specific amount of sales or income. Multiplier affects are often cited in order to capture the secondary effects of tourism expenditure and to display the wide range of sectors in a community that can profit from tourism.

**3.3 Types of Economic Analysis**

For a number of reasons, industry advertises tourism's economic benefits. On the one hand, arguments about tourism's significance make the industry more respectable in the eyes of business community, government officials, and the general public: this often leads to tourism-friendly decisions or government policies. Furthermore, support from the community is essential for tourism; industry affects every single community and is affected.

Tourism also involves economic costs: direct costs sustained by the tourism business; government expenditure on tourism infrastructure; and related costs (such as inflated prices) incurred by a community individual. A balance between supporters of the industry who argue about the economic impacts of tourism and opponents who emphasize the costs of tourism are often not included in community tourism decisions. This is a clear image of the situation.

Sound decision-making must be based on a balanced cost and benefit assessment and an understanding of who is going to get it and who is going to pay for it as a side effect of tourism. Therefore, tourisms economic effects are an important issue in economic development, state, regional and community planning, marketing and decision-making. Communities need to realize the relative value to their region of tourism, such as the influence of tourism to the area's economic activity.

A wide choice of methods is used to estimate the economic effects of tourism, ranging from pure conjecture to complex mathematical models: studies vary widely in terms of quality and correctness and in terms of which aspects of tourism are involved. Technical reports are often loaded with economic terminology not understood by none economists, while media coverage of such studies tends to oversimplify and misinterpret results. As a consequence, decision-makers and the general public have a distorted or inaccurate understanding of the economic effects of tourism.

To support tourism decisions, a variety of economic analyses are performed: as these are often confused. These analyses can be applied to any policy or action, but in the tourism context they are determined here. In terms of the basic questions it answers, each type of analysis is described.

**Economic Impact Analysis**- How does tourism activity contribute to the region's economy? An economic effect analysis marks the flows of tourism-related expenditure in a region to recognise changes in sales, tax revenue, income, and jobs as a result of tourism activity. The methodologies used to assemble this information contain: surveys of visitor spending; analysis of secondary data from government economic statistics; models of economic base; models of input-output; and multipliers (Frechtling 1994a).

**Analysis of financial impact-** Will government income from tourism activities cover additional costs for infrastructure and public services in the form of taxes, direct fees and other sources? The fiscal impact analysis identifies fluctuations in public utilities and services that have resulted from certain tourism-related activities and predicts the revenues and costs of providing these services to local governments (Burchell and Listokin 1978).

**Financial analysis**- Can this activity benefit Business X? Financial analysis defines whether an enterprise will make enough money to cover its costs and generate reasonable profits. It generally includes a short-term analysis of start-up capital availability and cost, and also a long-term analysis of debt servicing, operating expenses and revenue. Private business financial analysis is identical to a local government unit's financial impact analysis.

**Analysis of demand**- How the number or types of visitors to the area change due to price changes; promotion; competition; quality and quantity of objects; or other shifts in demand? Analysis of demand enables you to predict a region's number and/or types of visitors using models of prediction, demand or use. Usually, the number of visitors or sales is predicted on the basis of judgment (Delphi method); historical trends (time series methods); or using a model that records how visits or costs vary depending on key demand factors such as population size, market distance, income level, and indicators of quality and competition (structural models) (Walsh 1986, Johnson and Thomas 1992).

**Benefit / Cost (B / C) Analysis:** Which strategy will provide society with the highest net benefit over time? By comparing benefits and costs over time, a B / C analysis estimates the relative economic efficiency of alternative policies. Analysis of B / C is often confused with analysis of economic impact. Benefit cost analysis defines the most effective policies from a social welfare perspective, taking into consideration monetary and non-monetary values in general, whereas economic effect analysis only benefits from actual market transactions (money flows) and focuses on regional income distribution, not economic efficiency.

The income earned by the tourist destination is largely compensated by a correlating loss of income in the regions of descent (tourist-generating), yielding only modest social welfare contributions. Benefit cost analysis uses a wide range of strategies to estimate non-market goods and services values, such as the method of travel costs and the method of contingent valuation (Stokey and Zeckhauser, 1978; Sudgen and Williams, 1978).

**Feasibility Study:** Does this project or policy have to be carried out? A research project defines the feasibility of taking a given action taking political, physical, social and economic factors into consideration. In order to identify financial and market feasibility, the economic implications of a feasibility study usually involve a financial analysis and a market demand analysis. A feasibility study is the version of the benefit cost analysis for the private sector: the feasibility study concentrates largely on an individual organization's benefits and costs, while B / C analyses benefits and costs for a larger society (Warnell, 1986).

**Environmental Impact Assessment:** What are the environmental impacts of an action? An environmental effect assessment estimates the environmental effects of a proposed action, along with shifts in social, cultural, economic, physical, biological and ecological systems in general. Methods for evaluating economic impact are often used in conjunction with appropriate measures and models for assessing social, cultural and ecological effects. Simple checklists to shed some light simulation models range from methods (Williams, 1994).

Since each type of effect analysis is somewhat different, multiple types of analysis are often required by a given problem. A study of economic consequences will often include a demand analysis of tourism activity project levels. In other circumstances, demand is regarded as exogenous or fixed, and if a given number of tourists are attracted to the area, the analysis simply predicts impacts. Furthermore, an extensive impact assessment will examine tax, social and environmental influences.

Be aware that evaluates of economic effects alone offer narrow and often one-sided perspectives on the implications of tourism, tending to highlight only the benefits. On the other side, studies of environmental, social, cultural and fiscal influence tend to concentrate more on tourism's negative impacts. This happens even though tourism has potential negative economic effects (e.g. seasonality and lower salary jobs) and potential positive environmental and social influence (e.g. protection of the natural and cultural resources of the area, and education for both tourists and local residents).

**3.4 Economic impact assessment address**

The contribution of tourism activity to the economy of a region is determined by an economic impact assessment. The fundamental issues addressed by a study of economic effects are summarized below.

EIAs are most generally used in tourism for the following purposes: to assess the economic effect of changes in tourism supply: changes in supply may take the form of a change in quantity (e.g. opening of new facilities, closing of existing facilities or expansion and decrease in capacity) or quality (with respect to the environment; local infrastructure and public services supporting the development of new facilities).

To assess the economic effects of tourism demand changes: population changes; changes in the region's competitive position or marketing; or changing consumer needs and desires may change tourism activity levels, spending, and associated economic activity. An economic impact researcher estimated these impacts ' magnitude and nature.

To assess the effects of policies and actions that directly or indirectly affect tourism activity: tourism depends on several factors that are often outside of the tourism industry's direct control. Studies of economic impact provide information that can help decision-makers understand the effect of different actions on the tourism industry and other economic sectors. For instance, proposals to raise air pollution standards in some regions are opposed by the argument that firms that are unable to meet the new higher standards will have to close, with negative economic implications. Sometimes tourism interests can counter this argument with estimates of potential profits in income and jobs related to tourism as a result of increased visibility and air quality.

Understanding the economic structure and dependencies between economic sectors: Tourism economic studies help us to better understand the size and structure of the tourism industry in a particular region and its connections with other economic sectors. Such understanding helps to identify potential associates for the tourism industry and to target businesses as part of strategies for regional economic development. As part of these studies, issues like economic progress, stability, and seasonality can be addressed.

To argue for preferential treatment in resource allocation or local tax, zoning or other policy decisions: by demonstrating that tourism has significant economic influences, tourism interests can often persuade decision-makers to assign more tourism resources or to develop policies that encourage tourism. Tax reductions and other incentives given to manufacturing firms were granted to hotels, marinas and other tourism companies based on demonstrated economic effects in the local area.

Comparing the economic effects of resource allocation / policy / management / development policies: Economic impact analysis is commonly used to evaluate the relative importance of alternatives. The economic contribution of extended tourism offerings can be compared with that of alternatives such as resource extraction (mining, timber harvesting) or manufacturing using standard regional economic analysis tools. These tools also enable to compare various proposals for tourism development: a tourism strategy can be weighed against one that proposes a factory outlet mall in terms of potential economic effects.

Economic impacts of tourism typically ignored in Economic Impact Analysis’s;

Changes in prices: tourism can lead to inflation, particularly on a seasonal basis, in local housing and retail prices.

Shifts in the quality and quantity of goods and services: in response to tourism, the variety of goods and services locally available may increase: the quality of these products may also differ.

Changes in property taxes and others: as a result of tourism, local service taxes may rise or decrease. In the form of reduced taxes for schools, roads, and so on., taxes composed directly or indirectly from visitors may benefit local people. On the other side, to cover additional tourism-related infrastructure and service costs, local people can be taxed more heavily. In a fiscal impact analysis, the effect of tourism on local government expenditures and profits is addressed more fully.

Economic effects of social and environmental impacts: these can be positive or negative: traffic jams, for instance, will boost transport costs for host households and businesses. Enhanced accommodations attracting tourists may attract pensioners as well as businesses outside the tourism industry.

**3.4.1 Examples of Tourism Economic Impact Studies**

The Money Generation Model (MGM) of the National Park Service: This is a one-page cookbook that covers the key elements of an economic impact analysis, although it takes a very simple approach. Average expenditure; number of visits; and aggregate multipliers are joined on a simple worksheet: as a result, total projections of visitor expenditure's sales, revenue, employment, and tax effects are generated. Given the parameters are wisely chosen, the MGM model can provide good economic impact estimates at minimal cost to the ballpark. The example quoted in the bibliography estimates the effect of Mammoth Cave National Park visitors on a Kentucky region of three counties.

The RIMS II Multipliers of the Bureau of Economic Analysis: These come from their user manual, that mostly explains how released multipliers can be applied to estimate economic effects. This strategy begins with visitor expenditure divided into several categories of expenditure and applies sector-specific multipliers to estimate the effects of sales, income and employment. The RIMS Multipliers are used in the example mentioned in the bibliography to estimate the effects resulting from an increase in tourists visiting Illinois State.

MI-REC / IMPLAN System: MI-REC system reports the economic effects of recreation and tourism, provides spreadsheet tools for estimating tourist expenditure and applies them to regional input-output models estimated using the IMPLAN input-output modelling system. The explanation quoted estimates the impact of Michigan tourism expenditure using segments described by residency and type of accommodation.

**3.5 Multiplier Effects of Tourism in Economy**

A multiplier is the complete effects divided by the direct impacts of tourism (direct, indirect and/or induced). This idea is based on income recirculation: beneficiaries use some of their income to spend on consumption, resulting in additional income and employment. (1994, Frechtling).

Multipliers catch the (indirect and induced) secondary economic effects of tourism activity. In tourism studies, multipliers are often misused and misinterpreted, and are thus a significant source of confusion for non-economists. Multipliers represent sectors ' economic interdependencies within the economy of a given region: they vary widely from county to country and from sector to sector. Depending on which side effects are used and which measure of economic activity will be used (sales, income, or employment), there are many different forms of multipliers.

For instance,

The Type I sales multiplier = (direct sales + indirect sales)/direct sales

The Type II or III sales multiplier1 = (direct sales + indirect sales + induced sales)/ direct sales

The multipliers mentioned above are called ratio type multipliers because they measure the ratio of a total impact measure to the corresponding direct influence. Multipliers of the comparable income and employment ratio can be described by replacing sales in the above equations with income or employment measures. Multipliers of the ratio should be used cautiously. One common problem is to multiply by tourist expenditure a sales multiplier to achieve full sales effects. This generates an artificially high estimate of the impact of tourism because tourism expenditure (or sales) is not exactly the same as the direct effects in the formula for multipliers. The primary source of this difference is tourist buying of goods (vs. services).

In order to properly apply tourist purchases of goods to an input-output model (or corresponding multipliers), different margins (retail, wholesale and transport) must be removed from the customer price of a good in order to obtain the producer price. In an I-O model, retail margins increase to the retail sector, wholesale margins to wholesale trade, transport margins to the transportation sectors (transportation, rail, air, etc.) and the producer price of a good is assigned to the producing sector.

There is an instant leakage in the first round of expenditure when tourists buy goods produced by outside (non-local) manufacturers and therefore no local effect from production. Before implementing a multiplier to tourist expenditure, the producer prices of all imported goods that tourists buy must first be deducted: Include local retail margins and potentially wholesale and margins of transportation if established within the region. Commonly, as a local final demand, only 60 to 70 percent of tourist expenditure appears. While all tourist payments of services will be received by the local region as final demand, only the margins on products purchased at retail stores should be considered as final local demand. The ratio of local latest demand for tourist spending is called the capture rate. Capture rates, such as multipliers, vary based on the region's size and nature and the types of tourist expenditure included. Therefore, one must be careful to take and use a multiplier or capture rate quoted in one study.

Capture rate = local final demand / local tourist spending

Another way to estimate a multiplier is as a ratio of profits or employment

to sales (usually the preferred approach among economists). Sometimes this

type of multiplier is named a Keynesian multiplier or coefficient of response.

Income and Employment Multipliers:

Type III Income Multiplier = Total direct, indirect, and induced income / Direct sales

Type III Employment Multiplier = Total direct, indirect, and induced income / Direct sales

This income (employment) multiplier, when multiplied by direct sales, produces total income (employment) effects. One still has to be able to differentiate between the spending / sales of tourism and the effects of direct sales. Some studies may include the capture rate in the multiplier, expressing the ratio rather than direct sales in terms of tourism expenditure.

**3.6 Measuring Methods of Tourism’s Economic Impacts**

Defining the Economic Impact of Tourism:

Economic Impact of Tourism = # of Tourists \* Ave. Spending per Visitor \* Multiplier

Where ‘# of tourists’ = numbers of tourists and ‘ave.’ = average

Estimate the difference that will result from the proposed policy or action in the number and types of tourists in the region: predictions or projections of tourism activity generally come from a demand model or some system for measuring tourism activity levels in an area: estimates of economic effects rely on good estimates of the number and categories of visitors from carefully designed measurements. In most tourism impact assessments, this step is usually the weakest point, a few regions have detailed tourist counts, let alone good models to anticipate changes in tourism activity or separate local visitors from non-regional visitors. Predict average expenditure levels of tourists in the local area (often within specific market segments): expenditure averages are either from test surveys or improved from other studies. Estimates of expenditure must be grounded on a representative example of the tourist population and should take into consideration variations across seasons, market segments or tourist types, and locations inside the study area. Since spending can differ greatly by type of tourist, we suggest estimating average spending on a set of key segments of tourism based on samples of at least 50-100 visitors per segment of tourism.

Sections should be determined to capture spending differences between local residents versus tourists, Day users versus overnight tourists, type of accommodation (motel, seasonal home, campground, friends and family) and sort of transport (car, RV, air, rail, etc.). In wide-ranging tourism impact studies, it is useful to define unique spending patterns for essential segments of activity such as downhill skiers, boaters, convention & business travellers.

Multiplying the number of visitors by the average expenditure per visitor (making sure units are consistent) provides an estimate of total tourism expenditure in the area. Tourist spending projections will generally be more reliable if there are separate spending profiles and usage estimates for key segments of tourism. Estimates of use and expenditure are the two main components of an economic effect assessment. Together, they capture the amount of money tourists have brought into the region. Please note: multipliers are only needed if one is interested in tourism spending's secondary effects.

To determine secondary effects, apply the shift in expenditure to a regional economic model or set of multipliers: Tourism's secondary effects are estimated using multipliers or a regional economic model. Multipliers usually come from the economy of the region's economic base or input output model. Multipliers are often incorrectly borrowed or adjusted from published multipliers or other studies. Avoid taking an estimated multiplier for one region and smearing it in a region with an economic structure quite different. For larger regions with more globally competitive economies, multipliers are generally higher. A common mistake is to apply a state-wide multiplier to a local region (because they are more widely published). This will yield exaggerated estimates of local effects on multipliers.

Common Errors to Avoid with Respect to Multipliers:

* Do not apply state-wide multipliers to specific regions-the resulting calculations of local multiplier effects will generally be inflated.
* Do not take an estimated multiplier for one region as a general rule and apply it to a region with a various economic structure.
* Do not multiply a sales multiplier by tourist expenditure in an attempt to achieve overall sales effects: this generates an exaggerated estimate of tourism effects as tourism expenditure (or sales) is not precisely the identical as the direct effects in the multiplier formula.

Multipliers could be used to turn to income and employment estimates of expenditure or sales. Basic ratios are used to detect the amount of income per dollar of sales or the number of jobs generated. Due to the relative importance of labour inputs in each industry and different wage and wage rates in different regions of the country, these ratios will vary from country to country and across individual economic sectors.

Be mindful that job estimates are usually not equivalent in full-time, making it difficult to contrast them with different proportions of seasonal and part-time jobs across industries. Income and added value are usually the chosen measures of the influence of tourism to the economy of a region.

**3.7 The Design of Tourism Economic Impact Study**

The process of designing an economic effect study can be divided into four basic parts:

• Identifying the problem (7 sub-steps)

• Estimating the alter in final demand (specifically, the change in expenditure on recreation and tourism)

• Estimating the regional economic effects of this change

• Interpreting, applying and communicating the results.

This first part is the most essential part of any study: the clarification of the nature of the problem to be dealt with. This involves classifying the results' intended uses and users. In defining the study problem for an economic impact assessment, there are seven basic steps to be followed.

1.Describe the action: start by clarifying the action or actions that are involved in the issue. It is possible to use regional economic analysis tools to determine virtually any action that translates into changes in economic activity. Typical actions that are estimated to have an influence on recreation / tourism include:

• Open or close a park, recreation area, hotel, or tourist attraction.

• Shifting the size or quality of any of the above to influence the area's visitation and economic activity.

• Changing the activities of government in the area. Examples involve opening or closing an information centre for conventions or visitors; or changing government expenditure on promotion or transport systems.

• Policy changes affecting the number or types of visitors: e.g. by modifying the products and services offered; pricing; or promotional strategies.

2. Recognize changes in recreation / tourism activity resulting from the action: the action must be clearly defined in step one so that alters in the amount and type of visitors to the area and/or their patterns of expenditure can be estimated.

The analysis should generally focus on effects with vs. without the action rather than just before vs. afterwards. To demonstrate, if tourism has grown by 5 percent per year and a new promotional program improves this to 10 percent this year, the promotional program can only be attributed to half of the 10 percent increase.

One should always be clear about potential alternative situations when evaluating a change and evaluate the net change in activity between the action and its alternative. For instance, if a new hotel is being built in its first year and serves 200,000 guests, should all its customers be classified as new visitors to the area? Not necessarily because most of these guests may have previously sponsored conflicting area establishments, which means that there is less than 200,000 net gain in visitors to the area. On the other side, the facilities, conventions, special offers or events of the new hotel may have drawn new visitors staying elsewhere in the area, resulting in a net increase in new visitors to the area more than 200,000.

Identifying the net changes in activity related to an action can be a complex and difficult task, but impact assessments vary based on such estimates, so it is very important to stick to these details. In circumstances where there is uncertainty, we suggest using a range of estimates to evaluate impacts and to establish rough intervals of confidence around these estimates. The evaluation of a range of alternatives also allows the sensitivity of the results to the initial estimates of changes in activity levels to be evaluated.

3. Define the types of expenditure to be included: should the analysis involve expenditure on trips, purchases of sustainable goods, government expenditure and construction costs? The answer to this question depends on what the definition of the problem and whether changes in expenditure can be attributed to the interest action. Should this be included as an effect of this new campground if a visitor to a new campground recently purchased a new $100,000 camping vehicle? Perhaps not. Again, the relevant question is one' with vs. without': "If the new campground was not built, would the purchase have been made?". Durable purchases of goods can seldom be attributed to changes in individual sites (one possible exception is a large boat that would not have been purchased unless a marina slip was available to store it). Most of the impact assessments on recreation and tourism are focused on travel expenditure: even here, there are subtle with vs. no questions.

Consider a local resident who, while on a trip to a nearby park, stops and buys food. Must the purchase of the food be included in the expenses of the trip? Probably not, as these grocery stores would have been purchased locally anyway and therefore do not constitute "new" park-based expenditure. Recreation / tourism impact analyses often do not involve expenditure on a public park or agency rather than businesses in the area (such as expenditure on hunting and fishing licenses, entrance fees to the park).

A park or government agency's operating expenses could be assessed independently of visitor spending effects, but if park receipts were included in both visitor and agency spending, this would result in double counting. Analyse visitor spending impacts separately from the local economic impacts of park operations when estimating the effects of a public recreation organization: visitor spending in the form of park receipts would not be included in the visitor spending analysis, and operating costs rather than receipts should be used to assess the effects of government operations.

4. Define the study region: this is an essential but often neglected step: before carrying out an economic impact assessment, it is essential to determine the region or regions of concern. This step describes the area of interest and the types of visitor expenditure involved. Reiterating: visitor spending outside the study region (whether at home or on the way) is not included, nor are businesses outside the region directly or indirectly benefiting from visitor spending in the region. When a tourist buys a souvenir made outside the local area, only the retail margin (and possibly a wholesale and/or margin of transportation) associated with the purchase will accrue to the region. As discussed above, when a good is imported, the economic activity associated with the manufacture of the item leaves the region. Therefore, the region definition defines what direct visitor expenditure should be included in the analysis and what indirect and induced effects are to be counted.

The region of study should be large enough to be a sustainable economic region. Because there are few economic data below county level, a county is usually the smallest region that should be considered for an impact assessment of tourism. Most regional economic modelling projects can estimate models for any grouping of counties in the U.S. The smallest region for which models are generally estimated is a single county.

Even if the main area of attention is a single community, one should estimate effects at county or multi-county level (this larger region will usually be a better representative of a tourism economic region because it contains nearby places where tourists spend money, and businesses and workers in nearby communities serving tourists directly or through side effects. Counties can be combined to form a meaningful region for analysis within or across states.

By defining the points of origin of visitors and excluding these areas from the region to be analysed, new dollars (those entering the region as a outcome of tourist expenditure) can be distinguished from local resident spending. The region to be examined should include facilities and sites that are potential tourist attractions: it should also be a "functional economic area" with enough business wide range to be reasonably self-contained. Primary labour markets and shopping areas should also be included in the area within an easy reach.

5. Define key economic sectors and required sectoral detail: the proposed action and anticipated outcome uses / users should suggest the key sectors that will be affected. Recreation and tourism activity typically have direct effects on the sectors of housing, restaurant, entertainment, retail, transportation and government. Concern of affected sectors in the problem definition stage helps to define relevant categories of expenditure.

In structuring the presentation of results, the wanted sectoral detail plays a key role. Only an aggregate amount of effects can be desired in some cases. In other situations, customers may be attracted in which specific sectors are most influenced and will want sector-based estimates of sales and jobs. The effects can be estimated in significant sectoral detail if official input-output models are used. This is not possible when using an aggregate multiplier of tourism spending.

6. Define the most significant economic activity measures: tourism impacts can be reported in terms of visitor expenditure, business receipts / sales / production, income from wages and salaries, income and profits from owners, added value and employment. The effect measures can be further split into direct, indirect and induced impacts when using an input-output model or set of multipliers.

Effects can also be reported in relative or absolute terms (e.g. an increase of 1,000 jobs can be reported, or in an economy with 5,000 jobs, say the number of jobs has increased by 20 percent). In assessing the economic effects of existing activity (say current visitors), one may be interested in what portion of total jobs (or jobs in a specific sector) are accounted for by existing tourism expenditure. In relative or absolute terms, effects can also be reported (e.g. an increase of 1,000 jobs can be reported, or in an economy with 5,000 jobs, say the number of jobs has increased by 20 percent). When evaluating the economic effects of existing activity (say current visitors), one might be interested in what portion of total jobs (or jobs in a particular sector) are accounted for by existing tourism spending.

7. Define the acceptable error levels in the results: although error bars and error projections are rare in economic effect studies, it is essential to get a ballpark idea of how much error you can tolerate in the analysis, as this will determine how much effort and expenditure you have to put into it. The higher the required accuracy levels, the greater the need to collect up-to-date local visitation, expenditure, and economic activity data. Such data allows for fine tuning of the estimates of expenditure and input-output models or multipliers, but fine tuning takes time, knowledge and money to be weighed against the advantages of improved estimates.

Impact estimations are founded on three components: visits, expenditures and multipliers. Try to balance the errors across these elements (e.g. if estimates of visitation changes are off by 50 percent, worrying about errors of 10 or 20 percent in the other two components is wasteful–alternatively devote effort to increasing visitation estimates). In general, carefully collected spending data will have errors of at least 10% due to small sample sizes (sampling error); non-response error; or measuring error -less carefully collected data may have errors of more than 50%.

Spending data collected for a particular population at a particular time is generalized or extrapolated to a new situation in many cases. This presents additional errors if the new situation differentiates from the original data collection conditions. It may be essential to use judgment to evaluate the amount of error made when generalizing from secondary data: these mistakes should be within the range of 10-20 percent with good judgment, and if they are as likely to cancel each other as to add up, regardless of the errors in the original information.

Multiplier faults stalk from the degree to which the regional economy has been seized by the estimated input-output model. The study region may not be adequately represented by off - the-shelf or highly aggregated multipliers held from other studies. On the other side, multipliers vary significantly less than estimates of expenditure and visits. Multiplier-attributable errors in tourism studies are more often the result of misuse and interpretation than multiplier-inherent errors. Expect an area to vary by as much as 10 percent across different models / sources by the same type of multipliers.

**CONCLUSION AND SUGGESTIONS**

Tourism affects economies via three interrelated routes, so on: direct, indirect and induced impacts. Direct effects are those impacts that happen as a direct result of tourism operations, i.e. tourism expenditure, tourism sector employment and taxes paid by tourism activities. Indirect impacts are caused by the effect of tourism actions on other economic sectors, for example, hotels buying goods from retailers or producing food from manufacturers. Induced effects are shifts in economic activity resulting from households benefiting from the tourism sector, for example, tourism employees paying taxes as well as spending money on local products and services. These effects and the structure of the tourism sector decide the economic impact of the sectors on a country.

As a whole, the section demonstrates that the tourism sector has a clear positive effect on growth–data on the tourism sector's direct and total impacts shows strong positive economic effects. What the data is lacking, moreover, is the equal distribution of these impacts.

As the effect of tourism on growth, its impact on the economy is also positive.

General tourism (globally) contributes to a substantial amount of jobs and also paled in comparison with other important sectors like the extractive sector, the financial sector, and the automotive construction sector. The extent of its effects varies by country and the prevalence of tourism within it, but all in all, it is a net contributor to jobs.

The effect of tourism on income is more difficult to quantify than growth and employment, mainly due to a limited amount of data and global level. The accessible case study data highlights that tourism has a positive effect on income, both monetarily and non-monetarily (particularly for rural households involved in the sector). The sector also appears to have a positive effect on livelihoods and poverty.

The Tourism Satellite Account is indeed the exceptional tool for measuring the direct consequences of Tourism Consumption on the national economy. But there are a host of extra consequences that legislators, industry officials, tourism industry workers, and others should be conscious of. This paper indicated how the industry-by-industry vector of tourism consumption can be applied to the macroeconomic analysis tools of input-output-models, social bookkeeping matrices, and computable general equilibrium systems. The examples quoted in this paper suggest the value and use of such extensions.

In a lot of respects, tourism is the world's top industry and is responsible for investment, production, growth, and development; along with foreign directive investment, it is the most vital source of foreign exchange. Making tourism a more viable business will foster the country's economy and generate more and better employment and jobs for higher returns on investment, which can benefit the region's development as well as contribute to poverty reduction and raise awareness and support for the continual use of natural resources.

At the risk of overstating a complex topic, let me draw the conclusion with the three pieces of advice. Firstly, I would like to start that a good estimate of the number of guests is the most essential information for estimating tourism effects. This involves a clear definition of what you want to provide as "tourism" and the region of interest. Secondly, I suggest that tourists be split into separate subgroups (segments) with unique spending patterns and likely to react differently to various policy and marketing behaviour.

Local customers, in particular, should be characterized by visitors from outside of the region and day consumers from overnight visitors. Third, concentrate most of your attempt on estimating the direct impacts of tourism, typically as tourist spending in the region. In many other cases, multiplier impacts are not closely as significant as their use in tourism would recommend and multipliers tend to implement complexities not fully understood by most users of results. Although multiplier effects are important for the purpose of the study, remember that any faults in estimating the direct impacts are also multiplied by some other multiplier.

At last, as the best indicator of economic effects to report, I suggest income or value added. Sales and job effects can be quite ambiguous as sales can go largely to buy parts from outside of the region and job assessments are distorted by part-time and seasonal positions, not to bring up quite distinct wage rates throughout industries. Income or added value is the best indicator of tourism economic benefit for the region. As a result, multipliers of income (Keynesian type) could be used instead of multipliers of sales.

**REFERENCES:**

1. Agaraj X, Murati M (2009), Tourism an Essential Sector of Economic Development;

2. Akkemik, A.K. (2012), Assessing the relevance for the Turkish economy of tourism: a social accounting matrix analysis, Tourism Management, 33, pp. 790-801.

3. Archer, B. (1977), Tourism Multipliers: State of the Art, Bangor Occasional Economics Paper, No. 9, University of Wales Press, Bangor, UK.

4. Economic Analysis Bureau, U.S. (2012a), Travel and Tourism Spending Increased in the first quarter of 2012;

5. Economic Analysis Bureau, U.S. (2013), U.S. Travel and Tourism Satellite Accounts for 2009-2012, Current Business Survey, 93(6), pp. 35-49.

6. Cañada, A. (2013), Regional Satellite Tourism Account, UNWTO Statistics and TSA Issue Paper Series STSA / IP/2013/02;

7. Commission of the Economic Cooperation and Development Organization of the European Communities, World Tourism Organization, United Nations (2008), Tourism Satellite Account: Recommended Methodological Framework 2008 (Luxembourg, New York, Madrid, Paris);

8. Dwyer, L., Forsyth, P., Madden, J., Spurr, R. (2000), Economic effects of inbound tourism under various macroeconomic assumptions, Recent Issues in Tourism, 3(4), pp. 325-363.

9. Frechtling, D. (2010), Satellite Tourism Account: A Primer, Annals of Tourism Research, 37(1), pp. 136-153.

10. Ashley, C. (2000)' Effects of Tourism on Rural Living: Namibia's Experience ' ODI Working Paper 128, February 2000.

11. Banskota, K (2012)' Impact of Tourism on Local Employment and Income in Three Selected Locations: Case Studies of Sauraha, Nagarkot and Bhaktapur ' Nepal Tourism and Development Review 2, 2012.

12. The Importance of Tourism (2015);

13. Baum, T (2013)' International Insights on Women and Work in Hotels, Catering and Tourism'.

14. CEPAL (2007) "Tourism and Social Conditions in Central America: Experiences in Costa Rica and Nicaragua" ECLAC, 2007.

15. Fernandez-Morales, A (2003) "Decomposing Seasonal Concentration" Annals of Tourism Research, Vol. 30 No.4, 2003.

16. Gossling, S. Peeters, P. Hall, M.C. Ceron, J. Dubois, G. Lehmann, LV. And Scott, D. (2012)' Tourism and Water Use: Supply, Demand and Security. An International Review "Progress in Tourism Management, No. 33 (2012).

16. Horvath, E & Frechtling, DC (1999)" Estimating the Multiplier Impact of Tourism Expenditure on Local Economy Via a Regional Input-Output Model "Journal of Travel Research, Vol. 37, 4, May 1999

17. Klytchnikova, II & Dorosh, PA (2009) "How tourism can (and does) benefit the poor and the environment – Panama case study" World Bank, Enbreve Responsible Tourism Series, August 2009, No. 146

17. Sathwara S (2010) Economic importance of tourism

18. Patel D (2013) Role of the tourism industry in foreign exchange generation

19. Vellas F (2012) Tourism's indirect impact: an economic analysis

20. Frechtling, C. Douglas. 1994. Assessing the economic effects of travel and tourism –Introduction to measure the economic effect of travel. In. Research on Travel, Tourism and Hospitality, second edition. J.R. Brent Ritchie and (eds) Charles R. Goeldner. New York: John Wiley, Sons Inc.

21. Hall, C. M., and Lew, A. A. (2009). Understanding and maintaining the impacts of tourism: an integrated approach. Routledge.

22. Stynes, J.D. (1999). Approaches to estimate tourism's economic impacts; some examples. East Lansing, MI: Park Department, Recreation and Tourism Resources, Michigan State University.

23. Adams, P. D., Parmenter, B. R. (1995), General Equilibrium Analysis of the Economic Impacts of Tourism in a Small, A quite Open Economy, Applied Economics, 27, pp. 985-994.