MINISTRY OF TOURISM AND WILDLIFE

RESEARCH REPORT ON

IMPACT OF THE HOTEL SECTOR EXPENDITURE ON THE ECONOMY IN KENYA:
AN ANALYSIS OF SELECTED HOTELS IN 2019

THIS RESEARCH HAS BEEN COMMISSIONED BY THE NATIONAL TOURISM CRISIS STEERING COMMITTEE UNDER THE MINISTRY OF TOURISM AND WILDLIFE, KENYA; IN COLLABORATION WITH THE KENYA ASSOCIATION OF HOTELS KEEPERS AND CATERERS (KAHC)

October 2020
# Table of Contents

**ABSTRACT** ........................................................................ vii

**LIST OF TABLES** ............................................................. iv

**LIST OF FIGURES** ........................................................... v

**LIST OF ABBREVIATIONS AND ACRONYMS** .......................... vi

**CHAPTER 1 INTRODUCTION** ................................................. 1

1.1 Background to the Study .................................................... 2
1.2 Purpose of the study ........................................................ 3
1.3 Specific Objectives .......................................................... 3
1.4 Conceptual framework: Nature of Hotel Economic Impact ......... 4
1.5 Limitations and Delimitations of the study ............................. 5

**CHAPTER 2 LITERATURE REVIEW** ....................................... 6

2.1 Contribution of Hotels to the Economy ................................. 7
2.2 Methodology for Economic Impact Assessment ...................... 7
2.3 Results of Past Impact Studies ........................................... 8
2.4 Gaps from literature ........................................................ 8

**CHAPTER 3 RESEARCH METHODOLOGY** .............................. 10

3.1 Introduction ................................................................ 11
3.2 Research Design ........................................................... 11
3.3 Study Area ................................................................ 11
3.4 Target Population ......................................................... 11
3.5 Sampling Techniques ...................................................... 12
3.6 Sample Size ............................................................... 12
3.7 Research Instruments ..................................................... 12
3.8 Data Collection Techniques ............................................. 12
3.9 Validity and Reliability .................................................... 12
3.10 Data Analysis ............................................................. 12
3.11 Logistical and Ethical Considerations ................................ 13

**CHAPTER 4 RESULTS AND DISCUSSIONS** ............................. 14

4.1 Analysis of the contribution of the Hotel Sector to Kenya’s GDP ........ 15

4.1.1 GDP by Activity from 2014 to 2019 ................................. 15
4.1.2 GDP Growth Rates of Hotels from 2014 to 2019 .................. 17
4.1.3 GDP by Activity, Current Prices (USD Million) for 2019 .......... 17
4.1.5 GDP Growth rate for 2019 and 2020 ............................. 19
4.1.6 Visitor Arrivals through JKIA and MIA (first quarter, 2019 and 2020) ... 20
4.2 The Direct Impact of Selected Hotels to the Economy of Kenya ... 21
4.2.1 Direct Spending by Hotels ... 21
4.2.2: Economic Contribution of Hotels to the Economy of Kenya ... 22
4.3 Sectors Most Affected by the Hotel Expenditure ... 28
4.3.1 Total Employment Effects ... 28
4.3.2 Income Effects Across the Economy ... 29
4.3.3 Value-Added Effects across the Economy ... 29
4.3.4 Output Effects Across the Economy ... 30
4.4 Revenue generated by Selected Hotels in Kenya ... 31

CONCLUSIONS ... 32

5.0 REFERENCES ... 33

6.0 APPENDICES ... 35

APPENDIX 1 HOTEL EXPENDITURE (n=29) ... 35
APPENDIX 2 IMPACT SUMMARY OF THE ECONOMIC CONTRIBUTION OF HOTELS TO THE ECONOMY IN KENYA. ... 36
APPENDIX 3: TOURISM MULTIPLIERS ... 37
APPENDIX 4: RANKING OF EMPLOYMENT EFFECTS ACROSS THE ECONOMY ... 38
APPENDIX 5 RANKING OF INCOME EFFECTS ACROSS THE ECONOMY ... 39
APPENDIX 6 RANKING OUTPUT EFFECTS ACROSS THE ECONOMY ... 40
APPENDIX 7 RANKING OF VALUE-ADDED EFFECTS ACROSS THE ECONOMY ... 42
APPENDIX 8: GLOSSARY ... 44
LIST OF FIGURES

Figure 1.1: Economic Impacts of Tourism ........................................................................ 3
Figure 1.2: The Economic Impact of the Hotel Sector ......................................................... 4
Figure 4.1: GDP by Activity from 2014 to 2019 ................................................................. 16
Figure 4.2: GDP by Activity Growth Rates ...................................................................... 17
Figure 4.3: GDP by Activity Current Prices (USD Million) for 2019 .................................. 18
Figure 4.4: GDP by Activity ............................................................................................ 19
Figure 4.5: GDP Growth rate for 2019 and 2020 .............................................................. 20
Figure 4.6: Visitor Arrivals through JKIA and MIA ......................................................... 20
Figure 4.7: Hotel Expenditure in 2019 (n= 29 hotels) ......................................................... 21
Figure 4.8: Impact Summary of the Economic Contribution of Hotels to the Economy of
Kenya .................................................................................................................................. 22
Figure 4.9: Direct Effect of Hotel Spending ................................................................. 23
Figure 4.10: Indirect Effect ......................................................................................... 24
Figure 4.11: Induced Effect ......................................................................................... 24
Figure 4.12: Total Effect (Direct, Indirect and Induced) ................................................. 25
Figure 4.13: Effect on Employment ............................................................................. 26
Figure 4.14: Labour Income ....................................................................................... 26
Figure 4.15: Total Value-Added .................................................................................. 27
Figure 4.16: Output of Goods and Services ................................................................. 27
Figure 4.17: Economic Output for Hotels: Employment Comparison with Other Sectors in
Kenya .................................................................................................................................. 28
Figure 4.18: Ranking of Income Effects Across the Economy ....................................... 29
Figure 4.19: Ranking of Value-Added Effects Across the Economy ............................. 30
Figure 4.20: Ranking Output Effects Across the Economy ............................................ 30
**LIST OF ABBREVIATIONS AND ACRONYMS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGE</td>
<td>Computable General Equilibrium</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GoK</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>KAHC</td>
<td>Kenya Association of Hotel Keepers and Caterers</td>
</tr>
<tr>
<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
</tr>
<tr>
<td>MRIO</td>
<td>Multi-Region Input-Output</td>
</tr>
<tr>
<td>NAICS</td>
<td>North American Industry Classification System</td>
</tr>
<tr>
<td>NTCSC</td>
<td>National Tourism Crisis Steering Committee</td>
</tr>
<tr>
<td>SAM</td>
<td>Social Accounting Matrix</td>
</tr>
<tr>
<td>TRA</td>
<td>Tourism Regulatory Authority</td>
</tr>
<tr>
<td>TRI</td>
<td>Tourism Research Institute</td>
</tr>
<tr>
<td>UNWTO</td>
<td>United Nations World Tourism Organization</td>
</tr>
<tr>
<td>WTTC</td>
<td>World Travel and Tourism Council</td>
</tr>
</tbody>
</table>
ABSTRACT
Hotels are an integral part of a tourism destination. Provision of food, drink and accommodation is the core business of hotel establishments. In this regard, hotels engage in commercial activities with suppliers, employees and guests. The hotel product includes intangible services and tangible goods thereby having a wide economic activity spectrum. Economic impact studies are necessary as a prerequisite to policy decisions and structural changes in the tourism industry. This study researched on the economic impact of selected hotels to the national economy of Kenya. The theoretical model that guided the study was the Input-Output Model of measuring economic impact. The study was guided by the following objectives: To establish the direct economic impact of hotels to the national economy of Kenya, to assess the indirect economic impact of hotels to the national economy of Kenya and to assess the induced economic impact of hotels to the national economy of Kenya. The study also aimed to establish hotel spending on specific products as a prelude to the macro-economic impact. The targeted population for the study was all the Kenya Association of Hotel Keepers and Caterers (KAHC) member hotels in Kenya. The study undertook a census of the population by systematically acquiring and recording information from the association members of the KAHC. A total of 53 questionnaires were issued to all the members of the KAHC. The number of questionnaires collected after fieldwork was 29, representing a response rate of 54.7%. Economic inputs for this study were obtained from the following data sources: Kenya’s Input-Output that contains multi-regional Input-Output tables for 190 countries including Kenya and Kenya’s Social Accounting Matrix (SAM) which captures an economy’s expenditure and income linkages. SAM is derived by modifying the appropriate I-O table. Analysis was conducted using the IMPLAN Software package (https://implan.com) frequently used for tourism impact studies. Secondary data from the Kenya National Bureau of Statistics (KNBS) showed that the hotel sector contributed over USD 700 to the GDP. Hotel expenditure amounting to approximately USD 78 million was reported by 29 respondents. The expenditure was analyzed to establish employment labor income, total value-added and output of goods and services to the economy. The direct, indirect and induced effects of the hotel expenditure in these three areas, formed the total economic impact of sampled hotels to the economy. Hotel revenue for 20 hotels was reported as USD 121 million. The total impact was estimated to be: USD 157million as output, USD 35million as income and USD 95million as value-added. Many sectors of the economy are impacted by spending from hotels key amongst them being trade, taxes, financial services, transportation, electricity and health.
CHAPTER 1
INTRODUCTION
1.1 BACKGROUND TO THE STUDY

Travel and Tourism is one of the largest and fastest-growing economic activities, significant to most countries in the world, directly contributing approximately 2.9 trillion U.S. dollars to GDP (10%) in 2019 (Statista, 2020). The industry directly accounts for 1 in 10 jobs globally, equivalent to 319 million jobs (WTTC, 2020a). Over the years international tourist arrivals have shown impressive uninterrupted growth—from 25 million in 1950, to 278 million in 1980, 528 million in 1995, 952 million in 2010, 997 million in 2011, 1,044 million in 2012, to 1.5 billion in 2019 (UNWTO, 2020a; GoK, 2020). Regionally, tourism is one of the most important industries in Africa and contributed 8.5% (or $194.2bn) to the continent’s GDP in 2018 (WTTC, 2020a). The continent recorded a steady growth since 2009 with international arrivals reaching 71.2 million in 2019 (UNWTO, 2020a). The industry contributed 24.3 million (6.7%) of total employment in the continent.

For Kenya, tourism is one of the major economic pillars and the second largest contributor to foreign exchange earnings of over USD 1.57 billion and has created 1.1 million jobs (WTTC, 2020a). The country has shown an impressive performance with the country’s tourism arrivals growing by 3.9% from 2.02 million tourists in 2018 to 2.05 million tourists in 2019 (GoK, 2019). The growth was a 37.33% increase from 1.47 million in 2017. Domestic tourism in Kenya grew from 3,645,144 in 2017 to 3,974,243 in 2018, recording a 9.03% growth (GoK, 2020).

The movement of such a massive number of people and the associated expenditure has a profound impact on national, regional and local economies across the world. Spending by visitors on facilities and activities such as hotels, restaurants, sporting and cultural events, shopping, visitor attractions and as business visitors at conferences, provides a massive stimulus to local economies and employment (Deegan, 2020; GoK, 2020).

Research shows that the hotel industry is one of the fastest-growing sectors with significant multiplier effect on employment and related industries (ILO, 2020). Kim, (2012) argues that in developing countries, hotels and other related tourism products have a greater contribution to the local economy than most economic activities. The Ministry of Tourism and Wildlife in its national tourism blue-print 2030 has emphasized the importance of hotels in enhancing revenues of the tourism industry (GOK, 2017). Further, a study by the National Tourism Crisis Steering Committee on COVID-19 and Tourism showed that hotels contributes immensely to the country’s economy (GoK, 2020).

Hotels are defined by an array of activities associated with the provision of food, drink and accommodation. The sector is considered an important economic component to any community. This is because they generate revenue for local economies directly when tourists spend money in hotels, restaurants and entertainment venues. They also help economies indirectly because tourists purchase retail goods, pharmacy items and locally made souvenirs and crafts. In addition, the flow of tourists to hotels stimulates the building of infrastructure such as roads and public transportation. Economic impacts are the net changes in an economic activity associated with an industry, event, or policy in an existing regional economy (Watson & Deller, 2017). There are three key contributions of hotels to the economy, which are: direct impact, indirect impact and induced impact, as shown in Figure 1.1.
Despite the growth and multiplier effect of the hotels to the economy, the measurement of their economic impact on the national economy has received limited attention from scholars. While the Kenya National Bureau of Statistics (KNBS) and the Tourism Research Institute (TRI) have attempted to give some measurements of hotel industry, the larger economic impact has not been captured (KNBS, 2019; TRI, 2018). Studying the impact that an industry has to the economy, estimates what would likely be lost if the industry activities were removed or interfered with (Watson, Wilson, Thilmany & Winter, 2007). This study considers the economic impacts of hotels to the economy. Therefore, this study estimates the size and nature of impacts resulting from the hotel expenditure in Kenya, based on selected hotels.

1.2 PURPOSE OF THE STUDY

To determine the direct, indirect and induced impact of the hotel sector to the economy in Kenya.

1.3 SPECIFIC OBJECTIVES

1. To analyze the contribution of the hotel sector to the Country’s GDP
2. To estimate the direct, indirect and induced effects of selected hotels’ expenditure to the economy in Kenya.
1.4 CONCEPTUAL FRAMEWORK: NATURE OF HOTEL ECONOMIC IMPACT

The impact of hotels to destination economies is three-fold as highlighted by most economic impact studies within the hospitality industry. Hotels’ economic impacts can be direct, indirect and induced. Direct impact is the spending on goods and services as the hotel administers its operation and retail activity (Thonberg, Kleinhenz, Shrader & Niakamal, 2017). As a result of the direct spending, a ripple of indirect effects are generated when hotels use outputs from other industries, for instance in the purchase of materials such as food, drink and housekeeping. Hotels also need services like engineering, security, public relations and accounting. These indirect impacts promote employment in other local industries. The income earned by hotel employees and employees of hotel suppliers is spent by households within the local economy. The expanded household spending produces the induced impact. Workers earn wages from the hotel and its suppliers, and they spend it on rent, transport, clothing, food and other expenses and hence creating induced effects in the economy (Dogru, Mcginley & Kim, 2020). Their spending produces more employment opportunities in the patronized industries. Therefore, the total economic output is measured by increase in local productivity and its distribution across broad industry clusters. It includes all direct spending by hotels, as well as secondary spending by institutions affected by that initial hotel spending, as shown in Figure 1.2.

**Figure 1.2: The Economic Impact of the Hotel Sector**
Source: (Economics, 2015)
1.5 LIMITATIONS AND DELIMITATIONS OF THE STUDY

A key limitation related to the use of the complete enumeration approach in targeting all the 53 hotels who were members of the KAHC. Due to operational difficulties, the successful respondents were 29 hotels, and therefore there is a risk of negative bias due to incomplete coverage. However, since the response rate was above 50%, it is assumed that the successful responses represent the whole population.
CHAPTER 2
LITERATURE REVIEW
2.1 CONTRIBUTION OF HOTELS TO THE ECONOMY

The hotel sector is an integral part of Travel and Tourism, providing the accommodation and amenity aspects of the tourism product. Hotels are a key pillar in the development of any tourism destination. According to the International Labour Organization (2020), hotels, catering and restaurants are all considered by most organizations to belong to the tourism-characteristic industries and are therefore subsumed under tourism. The sector is a conduit through which many countries participate in the global economy as the support to international tourism. Notably, the contribution of hotels and other tourism products is greater than most industries within the developing world (Kim, 2012).

Tourism bodies in Kenya and other countries consider the hotel sector as a key economic activity and frequently develop policies to guide their operations (Odunga et al. 2018). These policy decisions should be informed chiefly, among others, by the impact of hotels on their destination (Mitchell, Font, & Li, 2015). Strategies, laws, taxation, grants, subsidies and any other financial lobbying effort concerning hotels should consider economic impacts (Hall, 2015). Webster and Ivanov (2014) argue that making informed decisions limits subjective policies, although there is danger of economic impact studies supporting a political position due to the complexity of tourism structures (Crompton, 2006).

The economic impact of hotels is direct, indirect or induced by commercial and non-commercial activities involved in the trading of accommodation. An economic impact study on the employment figures and the interrelationship between industries can estimate the size and nature of impacts resulting from projected changes in hotel expenditure.

Hotels also contribute to other sectors such as agriculture and manufacturing, as a result of being at the end of the value chain in producing food and beverage (Kim, 2012). Subsequently, hotel economic activities relate to the provision of both goods and services - tangible and intangible products. The tangible products are easily quantifiable within the industry’s economic environment; whereas the intangible aspects present more challenges in their economic quantification. Nonetheless, hotels invest in infrastructure and local capacity building thereby directly contributing to poverty alleviation and national development (UNWTO, 2020).

2.2 METHODOLOGY FOR ECONOMIC IMPACT ASSESSMENT

Efforts to research the contribution of hotels to the economy have been applied using both theoretical constructs and methodological approaches (Mayer & Vogt, 2016; Odunga et al 2019b). Studies are broadly categorised into quantifiable economic (monetary) terms and into qualitative terms (Mayer & Woltering, 2018). Quantitative studies usually measure the contribution of hotels to the labour market, the gross domestic product and household income, as well as earnings from foreign exchange.

The economic impacts of hotel expenditure can be estimated using economic models that identify and quantify the linkages between different sectors of the economy. The standard approach is to estimate the economic impacts of hotel expenditure by using Input-Output models (1-O), Social Accounting Matrix (SAM) and/or Computable General Equilibrium (CGE) models. This analysis adopts Input-Output and Social Accounting Matrix (SAM) models in analyzing the impact of increased hotel expenditure on Kenya’s tourism sector and economy. Direct impacts of hotels are usually established through Tourism Satellite
Accounts (TSA). Indirect impacts are studied using Input-Output (I/O) models. More complex models which combine I/O and other features to assess the net benefits of hotels are beyond the scope of this study.

2.3 RESULTS OF PAST IMPACT STUDIES

A study carried out by Kim and Kim (2015) analyzed output, labor income and employment multipliers from the input–output system for Texas hotel industry. The study used the IMPLAN 3.0 software which is an input-output model. The study compared the hotel/motel industry and the accommodations industry with the top ten industries and averaged each set of multipliers to estimate the relative importance and contribution of the two hotel industries to the economy of Texas. After this comparison, the aggregated input–output tables and multipliers were prepared to determine the economic inter-relationship between the two combined hotel industries and the non-hotel industries, using the criteria of the NAICS (North American Industry Classification System). The three findings of this study are summarized as follows. First, the two hotel industries impacted the state economy due to a high induced effect from output and a considerable direct, indirect and induced effect from labor income and employment, despite their relatively lower multipliers and the economic downturn in the state. Second, the hotel-related industry had a strong inter-dependent relationship with the finance and insurance-related industries. Finally, while the hotel industry generated more labor income and employment, it is interesting that other facilities in the accommodation sector created more output than the hotel industry.

1.4 GAPS FROM LITERATURE

The economic output of hotels and the determinants should be identified by decision makers across the tourism economic system. However, due to the difficulties of calculating economic impacts of their operations, chain and independent hotels rarely make informed decisions around the contribution they make to the economy (de Grosbois, 2012; Font, Walmsley, Cogotti, McCombes, & Häusler, 2012). There exists a gap in determining the channels of economic impact of the hotels in a country like Kenya in terms of:

1.4.1 Direct Impact

Production changes associated with changes in demand for the good itself; it is an initial impact on the economy. This includes employment and activity in the hotel sector itself.

1.4.2 Indirect Impact

The secondary impact caused by changing input needs of directly affected industries (e.g., additional input purchases to produce additional output). This entails employment and activity supported as a result of the hotels purchasing goods and services suppliers for example, jobs in the manufacture of food and beverages, agriculture, business services (such as advertising and market research), and communications.
1.4.3 Induced Impact

Caused by changes in household spending due to the additional employment generated by direct and indirect effects. These effects include employment and activity supported as employees within the hotel sector and its direct supply chain spend a proportion of their wages on consumer goods and services, which stimulates economic activity in retail and leisure outlets and their domestic supply chains (Oxford Economics, 2016).
CHAPTER 3
RESEARCH METHODOLOGY
3.1 INTRODUCTION

This chapter details the research process that was followed in conducting the study. Specifically, the chapter gives a description of the research design, location of the study, target population, sampling techniques as well as sample size, research instruments, validity and reliability, data collection techniques, and detailed data analysis procedures.

3.2 RESEARCH DESIGN

Following the Covid-19 outbreak, Kenya Association of Hotel Keepers and Caterers (KAHC) through the National Tourism Crisis Steering Committee (NTCSC) requested academia and industry practitioners to carry out a research study on the “Impact of the Hotel Sector to the Economy in Kenya”. The study adopted a cross-sectional descriptive research design. The research design was chosen due to its effectiveness and ease of access to information at a low cost. Consequently, a joint working team was formed. The team members comprised industry experts from the academia and practitioners within the country. Due to the infectious nature of the COVID-19 pandemic, the joint working team had to use the online and digital platforms.

3.3 STUDY AREA

The study area was Kenya, one of the countries in Africa which is located in East Africa Region. Kenya has 47 Counties and it covers 580,367 square kilometers with 47.6 million people. Kenya’s capital and largest city is Nairobi.

According to TRA (2020), there are a total of 211 classified accommodation establishments in Kenya with over 16,000 rooms and 26,000 beds spread across the country, as shown in Table 3.1.

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Area</th>
<th>Number of Establishments</th>
<th>Rooms</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Greater Nairobi</td>
<td>59</td>
<td>7051</td>
<td>10155</td>
</tr>
<tr>
<td>2.</td>
<td>Coast</td>
<td>47</td>
<td>4389</td>
<td>8502</td>
</tr>
<tr>
<td>3.</td>
<td>South Rift</td>
<td>47</td>
<td>1795</td>
<td>3371</td>
</tr>
<tr>
<td>4.</td>
<td>Western</td>
<td>15</td>
<td>781</td>
<td>1102</td>
</tr>
<tr>
<td>5.</td>
<td>Eastern</td>
<td>6</td>
<td>211</td>
<td>319</td>
</tr>
<tr>
<td>6.</td>
<td>Central and Mt. Kenya</td>
<td>26</td>
<td>1269</td>
<td>2360</td>
</tr>
<tr>
<td>7.</td>
<td>North Rift</td>
<td>11</td>
<td>568</td>
<td>763</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>211</strong></td>
<td><strong>16,156</strong></td>
<td><strong>26,786</strong></td>
</tr>
</tbody>
</table>

(TRA, 2020)

Amongst the 211 registered hotels in Kenya, 53 are members of KAHC (KAHC, 2020).

3.4 TARGET POPULATION

The target population was the 53 hotels who are members of the KAHC.
3.5 SAMPLING TECHNIQUES

The study used complete enumeration approach where all members of the whole population of the total 53 members of KAHC involved by systematically acquiring information from the members in the target population. This was preferred since the data population was small. This significantly improved the reliability of effort estimates since it does not involve frame survey data.

3.6 SAMPLE SIZE

The study undertook a census of the population by systematically acquiring and recording information from the association members of the KAHC. A total of 53 questionnaires were issued to all the members of the KAHC. The number of questionnaires collected after fieldwork was 29, representing a response rate of 54.7%.

3.7 RESEARCH INSTRUMENTS

The study used questionnaires to collect quantitative data. The questionnaires comprised close-ended questions and were administered online to the hotels in the target population.

3.8 DATA COLLECTION TECHNIQUES

The study collected primary and secondary data. Primary data were gathered using the questionnaires. To distribute the questionnaire, the CEO of KAHC sent an online version of the questionnaire to his members, who submitted the filled surveys through Survey123 software. Secondary data were gathered from published reports and was used to back-up primary data.

3.9 VALIDITY AND RELIABILITY

The validity and reliability of the data collection instruments were ascertained before actual data collection. To test the validity of the questionnaire, content validity technique was used to ascertain the adequacy of the questions for the purpose of the study. This was ensured through expert reviews and judgment by the hotel sector practitioners and academia. Test-retest method was used to further ascertain the reliability of the questionnaire.

3.10 DATA ANALYSIS

Data analysis was carried out using descriptive and economic modeling techniques. Tables and graphical presentations were used to present the data collected for ease of understanding and analysis.

3.10.1 Content Analysis

Data from the Kenya National Bureau of Statistics (KNBS) was analyzed to show the contribution of hotels to the GDP in Kenya.

3.10.2 Economic Models

Inputs for this study were obtained from the Kenya’s Input-Output Table. The study relied on Kenya I-O table available at the Eora National IO Tables that contains multi-region I-O tables (MROI) for 190 countries including Kenya. Further, the Kenya’s Social Accounting Matrix (SAM) was used to capture the economy’s expenditure and income linkages and was derived by modifying the appropriate I-O table. IMPLAN Software package (https://implan.com), frequently used for tourism impact studies, was adopted for current analysis. This study undertook a standard economic impact analysis to identify the three core channels of impact that stem from the activities of the hotel sector. These channels are direct effects, indirect effects and induced effects.
3.11 LOGISTICAL AND ETHICAL CONSIDERATIONS

During the period of carrying out the research, there are certain considerations and obligations that the researchers had to fulfill that included obtaining permission from the Ministry of Tourism and Wildlife through the National Tourism Crisis Steering Committee as well as ensuring confidentiality and objectivity of information.
CHAPTER 4
RESULTS AND DISCUSSIONS
4.1 ANALYSIS OF THE CONTRIBUTION OF THE HOTEL SECTOR TO KENYA’S GDP

Content analysis was carried out in order to give a detailed analysis of the contribution of the hotel sector to the GDP of Kenya.

4.1.1 GDP BY ACTIVITY – 2014 TO 2019

As shown in figure 4.1, contribution of major sectors to the economy to the GDP based on current prices, including the hotel sector (represented by accommodation and restaurant), has been on the increase from 2014 to 2019. The hotel sector recorded an increase of 46% from USD 492 million in 2014 to USD 718 million in 2019 (KNBS, 2019).
Figure 4.1: GDP by Activity – 2014 to 2019
Source: Analysis of Survey Data (2020)
4.1.2 GDP GROWTH RATES OF HOTELS FROM 2014 TO 2019

The hotel sector growth rate of the GDP accelerated from -16.7 percentage in 2014 to 16.6 percent in 2018, before dropping to 10.3 percent in 2019. The growth rate for the hotel sector surpassed all the major sectors from 2018, as shown in Figure 4.2.

**Figure 4.2: GDP by Activity, Growth Rates**
Source: Analysis of Survey Data (2020)

4.1.3 GDP BY ACTIVITY, CURRENT PRICES (USD MILLION) FOR 2019

For year 2019, an analysis of key sectors contribution to the GDP shows that hotels contributed USD 718 million to the country’s GDP, as shown in Figure 4.3.
Figure 4.3: GDP by Activity, Current Prices (USD Million) for 2019

Source: Analysis of Survey Data (2020)
4.1.4 GDP by Activity, Current Prices (USD Million) - 2019 (Per Quarter)

The hotel sector recorded a decelerated GDP growth from USD 192 million to USD 187 million between the 3rd and 4th quarters of 2019 before reducing further to USD 181 million in the first quarter of 2020, as shown in Figure 4.4.

![GDP by Activity, Current Prices (USD Million) - 2019](image)

**Figure 4.4: GDP by Activity**

Source: Analysis of Survey Data (2020)

4.1.5 GDP GROWTH RATE FOR 2019 AND 2020

The hotel sector GDP growth contracted by 9.3 per cent in the first quarter of 2020 compared to a growth of 11.0 per cent in the first quarter of 2019. The activity has been adversely affected by Covid-19 pandemic in many ways as international travels were either cancelled or suspended, hotels closed or scaled down their operations for indefinite period, and movement restrictions imposed in nearly all the countries (KNBS, 2020). This is illustrated in Figure 4.5.

![image]
Measures imposed by countries to mitigate the spread of Covid-19 resulted in a decline in number of international visitor arrivals (excluding Kenyans) through the two major airports from 364,744 in the first quarter of 2019 to 294,053 in the review period (KNBS, 2020), as shown in Figure 4.6.
4.2 THE DIRECT IMPACT OF SELECTED HOTELS TO THE ECONOMY OF KENYA

4.2.1 DIRECT SPENDING BY HOTELS

The survey carried out on 29 hotels who are members of the Kenya Association of Hotel Keepers and Caterers reported a total direct expenditure of USD 77,588,812 (KSh. 7,992,453,894) in 2019. The major spending occurred on food items (USD 19 million); other expenses (USD 16 million)\(^1\); energy (USD 10 million) and refurbishment (USD 6 million). The hotels spent a total of USD 22 million on restaurant supplies (food items and beverage). Food items included vegetables, fruits, meat and dairy products).

On the other hand, the hotels spent least on marketing (USD 0.12 million), uniform (USD 0.18 million), equipment (USD 0.6 million) and insurance (USD 0.74 million). This breakdown is presented in Figure 4.7.

---

\(^1\) Retail, repair, equipment, uniform, equipment hire, outsourcing, royalties, marketing, insurance and refurbishment

**Figure 4.7: Hotel Expenditure in 2019 (n=29 hotels)**
Source: Analysis of Survey Data (2020)
4.2.2: ECONOMIC CONTRIBUTION OF HOTELS TO THE ECONOMY OF KENYA

Hotels normally spend on inputs that include basic ones such as capital (short and long term) and labour (part and full time). The current study captured expenses related to utilities (such as water, electricity), raw material inputs (such as food/beverages, room supplies), services (covers transport, insurance, communication, health, finance etc.). Hotel suppliers receive revenue as a result of this expenditure (direct effects). This revenue helps in covering their costs such as wages/salaries, rent, interest and business profits (indirect effects). Wage income earned by hotel workers and that earned by hotel suppliers’ workers is spent on goods and services produced, to a large extent, within the economy (creating induced effects). These direct, indirect and induced effects are aggregated as total effects/impacts through multiplier operations. Figure 4.7 shows the effect of hotel expenditure amounting to USD 78 million in 2019. Employment in the economy was maintained at slightly over 30,000 workers through direct (13 thousand), indirect (9 thousand) and induced effects (8 thousand). Labour incomes as a result of this expenditure was over USD 35 million as generated through direct effects ($11 million), indirect effects (USD 16 million) and induced effects (USD 9 million). Total value-added in the economy was USD 95 million via direct effects (USD 40 million), indirect effects (USD 34 million) and induced effects (USD 22 million). Overall, output of goods and services in the economy was USD 157 million as realized through direct effects (USD 78 million), indirect effects (USD 49 million) and induced effects (USD 31 million). This is illustrated in Figure 4.8.

![Figure 4.8: Impact Summary of the Economic Contribution of Hotels to the Economy in Kenya](image)

**Source:** Analysis of Survey Data (2020)

[^1]: Production changes associated with changes in demand for the good itself; it is an initial impact on the economy.

[^2]: The secondary impact caused by changing input needs of directly affected industries (e.g., additional input purchases to produce additional output).

[^3]: Caused by changes in household spending due to the additional employment generated by direct and indirect effects.

[^4]: The output multiplier measures the effects generated by an extra unit of final demand on the output of industries in an economy, where output is equal to sales plus the increase in the value of stocks.
4.2.2.1 DIRECT EFFECTS OF HOTEL EXPENDITURE

The hotels expenditure of USD 77,588,812 created direct effects of 13,011 jobs, USD 11 million labour income and USD 40 million total value-added, as shown in Figure 4.9.

![Direct Effect Diagram](image)

**Figure 4.9: Direct Effect of Hotel Spending**
Source: Analysis of Survey Data (2020)

4.2.2.2 INDIRECT EFFECTS

From the initial hotels spending of USD 77,588,812, the indirect effect created close to 9 thousand jobs, USD 16 million labour income, 34 million total value-added and 49 million output, as shown in Figure 4.10.
4.2.2.3 Induced Effect of Hotel Expenditure to the Economy

As shown in Figure 4.11, the induced effects result from the spending of workers employed in the hotel sector and its direct supply chain. The induced output is estimated to USD 31 million, with a total value-added of USD 22 million, USD 9 million labour income and 8 million jobs.
4.2.4 TOTAL EFFECTS

The total effect (Direct, Indirect and Induced) that was created was 30 thousand jobs, USD 35 million in labour income, USD 95 million total value-added and USD 157 million output, as shown in Figure 4.12.

![Total Effect Diagram]

**Figure 4.12: Total Effect (Direct, Indirect and Induced)**
Source: Analysis of Survey Data (2020)

### 4.2.5 EFFECT ON EMPLOYMENT

The estimated breakdown of the jobs supported through the supply chain is presented in Figure 4.13. The hotels expenditure further created an increase in employment in the economy of 30,306 workers through direct (13 thousand), indirect (9 thousand) and induced effects (8 thousand).

---

4 Total multipliers include the full range of flow-on effects generated by an increase in economic activity. Thus, the total output multiplier is the total amount induced by the requirement from all industries to produce output to satisfy the demand for an extra dollar of output from an industry, and by the spending of the extra wage and salaries earned from producing the output by households (consumers).

---
4.2.2.6 LABOUR INCOME

Figure 4.14 shows that Labour income rose by close to USD 35 million through direct effects ($11 million), indirect effects ($16 million) and induced effects ($9 million).
4.2.2.7 TOTAL-VALUE ADDED

Total Value-Added in the economy was enhanced by USD 95 million through direct effects ($40 million), indirect effects ($34 million) and induced effects ($22 million), as shown in Figure 4.15.

**Figure 4.15: Total Value-Added**  
Source: Analysis of Survey Data (2020)

4.2.2.8 OUTPUT OF GOODS AND SERVICES

Figure 4.16 shows that the Output of Goods and Services in the economy expanded by USD 157 million through direct effects (USD 77 million), indirect effects ($49 million) and induced effects ($31 million).

**Figure 4.16: Output of Goods and Services**  
Source: Analysis of Survey Data (2020)
4.3 SECTORS MOST AFFECTED BY THE HOTEL EXPENDITURE

The hotel sector helped in sustaining jobs across many sectors of the economy through its supply chain impact. Table 2 presents the sectors most affected in terms of employment due to increases hotel expenditure. Most affected is the hotel sector followed by those of trade and restaurants. Employment among poultry, maize, vegetable, dairy, tea, beef and other services’ activities was also enhanced.

4.3.1 TOTAL EMPLOYMENT EFFECTS

Figure 4.17 shows the ten top sectors in generating total employment of 30,000 workers as a result of hotels expenditure of USD 78 million by 29 hotels in the economy over the year 2019. Most employment was generated by hotels (9,000 workers), trade (5,000 workers) and restaurants (4,700 workers).

![TOTAL EMPLOYMENT](chart)

**Figure 4.17: Economic Output for Hotels: Employment Comparison with Other Sectors in Kenya**

Source: Analysis of Survey Data (2020)
4.3.2 INCOME EFFECTS ACROSS THE ECONOMY

Figure 4.18 presents the sectors most affected in terms of income due to increased hotel expenditure. The most affected is the hotel sector followed by taxes and trade.

![Figure 4.18: Ranking of Income Effects Across the Economy](source)

Source: Analysis of Survey Data (2020)

4.3.3 VALUE-ADDED EFFECTS ACROSS THE ECONOMY

Figure 4.19 presents the sectors most affected in terms of total value-added due to increase hotel expenditure. Most affected is the restaurant sector followed by that of hotel, trade and then intermediate taxes on products.
4.3.4 OUTPUT EFFECTS ACROSS THE ECONOMY

Figure 4.20 presents the sectors affected in terms of total output due to increased hotel expenditure. Most affected is the hotel sector followed by that of restaurants, trade and financial services.
4.4 REVENUE GENERATED BY SELECTED HOTELS IN KENYA

The total revenue generated by 20 hotels who are members of the KAHC was reported to be USD 121,108,980 (Ksh. 12,474,224,919).
CONCLUSIONS

Hotel suppliers receive revenue as a result of its purchases (direct effects). The revenue helps in covering their costs such as wages/salaries, rent, interest and business profits (indirect effects). Wage income earned by hotel workers and that earned by hotel suppliers’ workers is spent on goods and services produced, to a large extent, within the economy (creating induced effects). These direct, indirect and induced effects are then aggregated as total effects/impacts.

This study made the following conclusions:

1. The hotel is a major economic sector in Kenya, contributing over USD 700 million to the GDP, recording over 10% GDP growth rate.

2. Twenty (20) hotels generated a total of USD 121 million. This gives an average of USD 6 million per hotel.

3. Twenty-nine (29) hotels incurred an expenditure of USD 78 million. This gives an average expenditure of USD 2.7 million per hotel.

4. The hotel sector GDP growth contracted by 9.3 per cent in the first quarter of 2020 compared to a growth of 11.0 per cent in the first quarter of 2019 due to the impact of Covid-19 pandemic that resulted to the cancelation of international travels closure of hotels or scaling down of their operations for indefinite period as well as movement restrictions imposed across the world.

5. The hotels expenditure further created an increase in employment in the economy of 30,306 workers through direct (13 thousand), indirect (9 thousand) and induced effects (8 thousand).

6. The hotels spending of USD 78 million created USD 49 million indirect spending and USD 31 million induced spending. This makes up a total impact of USD 158 million.

7. This further creates USD 35 million in labour income; USD 95 million total value-added and USD 157 million in total output.

8. The spending by hotels of USD 78 million accounts for the following in relation to other sectors:
   (a) For the total labour income, hotels accounted for USD 8 million, taxes USD 7 million and trade USD 4 million.
   (b) On total value-added, restaurants accounted for USD 22 million; hotels USD 21 million and trade USD 9 million.
   (c) Lastly on the output, hotels accounted for USD 57 million, restaurants 25 million and trade 15 million.
5.0 REFERENCES


### APPENDIX 1 HOTEL EXPENDITURE (N=29)

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Type of Hotel Expenditure</th>
<th>Amount of Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Food items (Vegetables, Fruits, meat and Dairy Products)</td>
<td>18,848,180</td>
</tr>
<tr>
<td>2.</td>
<td>Soft Drinks</td>
<td>3,073,960</td>
</tr>
<tr>
<td>3.</td>
<td>Stationery</td>
<td>1,764,450</td>
</tr>
<tr>
<td>4.</td>
<td>ICT</td>
<td>1,697,928</td>
</tr>
<tr>
<td>5.</td>
<td>Energy</td>
<td>10,069,082</td>
</tr>
<tr>
<td>6.</td>
<td>Water</td>
<td>977,494</td>
</tr>
<tr>
<td>7.</td>
<td>Guest Room Supplies</td>
<td>3,474,295</td>
</tr>
<tr>
<td>8.</td>
<td>Cleaning Agents</td>
<td>1,998,625</td>
</tr>
<tr>
<td>9.</td>
<td>Transport</td>
<td>3,129,483</td>
</tr>
<tr>
<td>10.</td>
<td>Health</td>
<td>1,687,154</td>
</tr>
<tr>
<td>11.</td>
<td>Finance Costs</td>
<td>2,238,475</td>
</tr>
<tr>
<td>12.</td>
<td>Repair</td>
<td>2,744,201</td>
</tr>
<tr>
<td>13.</td>
<td>Equipment</td>
<td>600,936</td>
</tr>
<tr>
<td>14.</td>
<td>Uniform</td>
<td>180,883</td>
</tr>
<tr>
<td>15.</td>
<td>Equipment Hire</td>
<td>757,656</td>
</tr>
<tr>
<td>16.</td>
<td>Outsource</td>
<td>1,377,192</td>
</tr>
<tr>
<td>17.</td>
<td>Royalties</td>
<td>739,792</td>
</tr>
<tr>
<td>18.</td>
<td>Marketing</td>
<td>116,587</td>
</tr>
<tr>
<td>19.</td>
<td>Insurance</td>
<td>735,135</td>
</tr>
<tr>
<td>20.</td>
<td>Refurbishment</td>
<td>5,512,913</td>
</tr>
<tr>
<td>21.</td>
<td>Other</td>
<td>15,864,391</td>
</tr>
<tr>
<td></td>
<td>TOTAL EXPENDITURE (n=29)</td>
<td><strong>USD 77,588,813</strong></td>
</tr>
<tr>
<td></td>
<td>TOTAL REVENUE (n=20)</td>
<td><strong>USD 121,108,980</strong></td>
</tr>
</tbody>
</table>
### APPENDIX 2 IMPACT SUMMARY OF THE ECONOMIC CONTRIBUTION OF HOTELS TO THE ECONOMY IN KENYA.

<table>
<thead>
<tr>
<th>Impact Type</th>
<th>Employment</th>
<th>Labour Income</th>
<th>Total Value-Added</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>13,043.9</td>
<td>10,687,468.8</td>
<td>39,680,911.3</td>
<td>77,588,812.9</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>8,879.9</td>
<td>15,757,163.8</td>
<td>34,136,461.7</td>
<td>48,719,892.5</td>
</tr>
<tr>
<td>Induced Effect</td>
<td>8,457.5</td>
<td>8,624,444.8</td>
<td>21,531,608.2</td>
<td>31,139,576.8</td>
</tr>
<tr>
<td>Total Effect</td>
<td>30,381.3</td>
<td>35,069,077.5</td>
<td>95,348,981.2</td>
<td>157,448,282.2</td>
</tr>
</tbody>
</table>

Impact Summary

KENYA ECONOMIC CONTRIBUTION OF HOTELS TO THE ECONOMY GENERAL PURCHASES. impdb

Copyright 2020 Minnesota IMPLAN Group, Inc.
APPENDIX 3: TOURISM MULTIPLIERS

The following table presents direct, indirect, induced and total effects for employment, labour income, value-added and output multipliers.

**TABLE: DIRECT, INDIRECT AND INDUCED TOURISM INDUSTRY MULTIPLIERS**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Effect</th>
<th>Output</th>
<th>Labour Income</th>
<th>Employment</th>
<th>Value-Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
<td>Direct Effect</td>
<td>1.00</td>
<td>0.13</td>
<td>165.51</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Indirect Effect</td>
<td>0.84</td>
<td>0.27</td>
<td>153.79</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>Induced Effects</td>
<td>0.47</td>
<td>0.12</td>
<td>125.18</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.31</td>
<td>0.52</td>
<td>444.48</td>
<td>1.25</td>
</tr>
<tr>
<td>Restaurant</td>
<td>Direct Effect</td>
<td>1.00</td>
<td>0.15</td>
<td>189.36</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Indirect Effect</td>
<td>0.17</td>
<td>0.05</td>
<td>25.18</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Induced Effects</td>
<td>1.29</td>
<td>0.08</td>
<td>77.70</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.46</td>
<td>0.27</td>
<td>292.25</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Source: IMPLAN Output, Researcher.

**Output**

For every $1 spent, the direct effect is $1 of output for both hotels and restaurants. Indirect effects are $0.84/$1 of output for hotels and $0.17/$1 of output for restaurants. Induced effects are $0.47 per $1 of output for hotels and $0.29 per $1 of output for restaurants. Total output multipliers are therefore 2.31 for hotels and 1.46 for restaurants.

**Labour Income**

One-million-dollar worth of production generated extra $520,000 labour income for hotels and $270,000 for restaurants.

**Employment**

Hotels have an employment generation total effect of 444.48 full-time equivalent (FTE) jobs for every $1 million worth of extra production. At the same level of production, the restaurants generate 292.25 FTE jobs.

**Value Addition**

One-million-dollar worth of production creates an extra total value of $1,250,000 for the hotels and $1,180,000 for restaurants.
## APPENDIX 4: RANKING OF EMPLOYMENT EFFECTS ACROSS THE ECONOMY

<table>
<thead>
<tr>
<th>Sector</th>
<th>Description</th>
<th>Total Employment</th>
<th>Total Labour Income</th>
<th>Total Value-Added</th>
<th>Total Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>Hotels</td>
<td>9,160.1</td>
<td>7,505,361.0</td>
<td>20,852,619.3</td>
<td>56,646,824.6</td>
</tr>
<tr>
<td>41</td>
<td>Trade</td>
<td>5,176.8</td>
<td>4,241,577.9</td>
<td>8,714,316.3</td>
<td>14,807,466.1</td>
</tr>
<tr>
<td>46</td>
<td>Restaurants</td>
<td>4,684.1</td>
<td>3,837,916.8</td>
<td>22,157,951.7</td>
<td>25,428,285.7</td>
</tr>
<tr>
<td>18</td>
<td>Poultry</td>
<td>1,423.9</td>
<td>602,067.1</td>
<td>1,227,564.6</td>
<td>1,050,012.0</td>
</tr>
<tr>
<td>1</td>
<td>Maize</td>
<td>1,085.8</td>
<td>459,094.7</td>
<td>1,283,433.1</td>
<td>1,315,923.1</td>
</tr>
<tr>
<td>13</td>
<td>Vegetables</td>
<td>969.5</td>
<td>409,941.6</td>
<td>954,956.0</td>
<td>929,129.0</td>
</tr>
<tr>
<td>17</td>
<td>Dairy</td>
<td>947.7</td>
<td>400,714.9</td>
<td>849,528.8</td>
<td>1,061,815.6</td>
</tr>
<tr>
<td>9</td>
<td>Tea</td>
<td>782.0</td>
<td>330,640.1</td>
<td>912,358.8</td>
<td>1,047,198.6</td>
</tr>
<tr>
<td>16</td>
<td>Beef</td>
<td>705.8</td>
<td>298,441.3</td>
<td>585,463.0</td>
<td>623,720.0</td>
</tr>
<tr>
<td>47</td>
<td>Other Services</td>
<td>625.4</td>
<td>1,459,007.7</td>
<td>4,808,749.4</td>
<td>5,913,524.3</td>
</tr>
</tbody>
</table>
### Appendix 5: Ranking of Income Effects Across the Economy

<table>
<thead>
<tr>
<th>Top Ten for Labour Income</th>
<th>KENYA ECONOMIC CONTRIBUTION OF HOTELS TO THE ECONOMY GENERAL PURCHASES.impdb</th>
<th>Copyright 2020 Minnesota IMPLAN Group, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sector</strong></td>
<td><strong>Description</strong></td>
<td><strong>Total Employment</strong></td>
</tr>
<tr>
<td>42</td>
<td>Hotels</td>
<td>9,160.1</td>
</tr>
<tr>
<td>52</td>
<td>Intermediate Taxes on Products</td>
<td>0.0</td>
</tr>
<tr>
<td>41</td>
<td>Trade</td>
<td>5,176.8</td>
</tr>
<tr>
<td>46</td>
<td>Restaurants</td>
<td>4,684.1</td>
</tr>
<tr>
<td>45</td>
<td>Financial services, real estate and insurance services</td>
<td>433.4</td>
</tr>
<tr>
<td>47</td>
<td>Other Services</td>
<td>625.4</td>
</tr>
<tr>
<td>43</td>
<td>Transport</td>
<td>410.6</td>
</tr>
<tr>
<td>39</td>
<td>Electricity</td>
<td>100.7</td>
</tr>
<tr>
<td>49</td>
<td>Health</td>
<td>272.5</td>
</tr>
<tr>
<td>18</td>
<td>Poultry</td>
<td>1,423.9</td>
</tr>
</tbody>
</table>
## APPENDIX 6 RANKING OUTPUT EFFECTS ACROSS THE ECONOMY

<table>
<thead>
<tr>
<th>Sector</th>
<th>Description</th>
<th>Total Employment</th>
<th>Total Labour Income</th>
<th>Total Value-Added</th>
<th>Total Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>Hotels</td>
<td>9,160.1</td>
<td>7,505,361.0</td>
<td>20,852,619.3</td>
<td>56,046,824.6</td>
</tr>
<tr>
<td>46</td>
<td>Restaurants</td>
<td>4,684.1</td>
<td>3,837,916.8</td>
<td>22,157,951.7</td>
<td>25,428,285.7</td>
</tr>
<tr>
<td>41</td>
<td>Trade</td>
<td>5,176.8</td>
<td>4,241,577.9</td>
<td>8,714,316.3</td>
<td>14,807,466.1</td>
</tr>
<tr>
<td>45</td>
<td>Financial services, real estate and insurance services</td>
<td>433.4</td>
<td>2,184,293.5</td>
<td>6,446,961.3</td>
<td>8,635,597.1</td>
</tr>
<tr>
<td>52</td>
<td>Intermediate Taxes on Products</td>
<td>0.0</td>
<td>6,689,244.7</td>
<td>6,689,244.7</td>
<td>6,689,244.7</td>
</tr>
<tr>
<td>43</td>
<td>Transport</td>
<td>410.6</td>
<td>1,115,218.7</td>
<td>2,758,740.3</td>
<td>6,183,690.4</td>
</tr>
<tr>
<td>47</td>
<td>Other Services</td>
<td>625.4</td>
<td>1,459,007.7</td>
<td>4,808,749.4</td>
<td>5,913,524.3</td>
</tr>
<tr>
<td>39</td>
<td>Electricity</td>
<td>100.7</td>
<td>879,718.5</td>
<td>2,824,445.8</td>
<td>3,311,865.1</td>
</tr>
<tr>
<td>37</td>
<td>Other Manufactures</td>
<td>129.1</td>
<td>425,495.1</td>
<td>1,792,616.2</td>
<td>2,843,369.0</td>
</tr>
<tr>
<td>44</td>
<td>Communication</td>
<td>167.7</td>
<td>455,435.4</td>
<td>2,127,251.5</td>
<td>2,774,723.2</td>
</tr>
</tbody>
</table>

Copyright 2020 Minnesota IMPLAN Group, Inc.
IMPACT OF THE HOTEL SECTOR EXPENDITURE ON THE ECONOMY IN KENYA: AN ANALYSIS OF SELECTED HOTELS IN 2019
## APPENDIX 7 RANKING OF VALUE-ADDED EFFECTS ACROSS THE ECONOMY

<table>
<thead>
<tr>
<th>Top Ten for Value-Added</th>
<th>KENYA ECONOMIC CONTRIBUTION OF HOTELS TO THE ECONOMY GENERAL PURCHASES.impdb</th>
<th>Copyright 2020 Minnesota IMPLAN Group, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>Description</td>
<td>Total Employment</td>
</tr>
<tr>
<td>46</td>
<td>Restaurants</td>
<td>4,684.1</td>
</tr>
<tr>
<td>42</td>
<td>Hotels</td>
<td>9,160.1</td>
</tr>
<tr>
<td>41</td>
<td>Trade</td>
<td>5,176.8</td>
</tr>
<tr>
<td>52</td>
<td>Intermediate Taxes on Products</td>
<td>0.0</td>
</tr>
<tr>
<td>45</td>
<td>Financial services, real estate and insurance services</td>
<td>433.4</td>
</tr>
<tr>
<td>47</td>
<td>Other Services</td>
<td>625.4</td>
</tr>
<tr>
<td>39</td>
<td>Electricity</td>
<td>100.7</td>
</tr>
<tr>
<td>43</td>
<td>Transport</td>
<td>410.6</td>
</tr>
<tr>
<td>44</td>
<td>Communication</td>
<td>167.7</td>
</tr>
<tr>
<td>37</td>
<td>Other Manufactures</td>
<td>129.1</td>
</tr>
</tbody>
</table>
IMPACT OF THE HOTEL SECTOR EXPENDITURE ON THE ECONOMY IN KENYA: AN ANALYSIS OF SELECTED HOTELS IN 2019
APPENDIX 8: GLOSSARY

**Output** is the value of production, and is equal to Value-Added plus Intermediate Expenditures. Intermediate expenditure is the money spent in purchasing good and services to create an industry’s production.

**Value-Added** is the combination of Labour Income, Other Property Type Income and Indirect Business Taxes. Other Property Type Income (OPTI) includes corporate profits, interest income, and rental payments, while Indirect Business Taxes (IBT) is taxes collected by businesses on behalf of the government. These include sales tax, excise tax, property tax, fees, fines, and licenses. Hence, Value-Added accounts for all non-commodity payments associated to an industry’s production. It can also be defined as gross domestic product (GDP).

**Labour Income** is composed of two components. These are Employee Compensation—the wages and benefits paid to wage and salary employees, and Proprietor Income—the profits earned by self-employed individuals. Thus Labour Income demonstrates a complete picture of the income paid to the entire labour force within the Model.

**IMPLAN Employment** is defined to include full and part-time annual average jobs for both employees and self-employed workers. Thus IMPLAN jobs look at all workers, regardless of their average hourly work-week. Because this definition is based on annual average employment, seasonal workers are also accounted for in the Employment numbers, so if 12 hotel workers each worked six months of the year, they would account in IMPLAN for 6 annual jobs. This methodology differs from some data sets that look at the number of employees at any point in time within an industry.

**Output multiplier**: An output multiplier for a sector is defined as the total production in all sectors of the economy that is necessary to satisfy a dollar’s worth of final demand for that sector’s output. In other words, every dollar change in final-demand spending (direct output) changes the total value of output in all sectors.

**Employment multiplier**: for every million-dollar change in final-demand spending (direct output), the change in employment (jobs).

**Personal income multiplier**: for every dollar change in final-demand spending (direct output), the change in income received by households.

**Sales (transactions) multiplier**: measures the total increase in business turnover generated by an extra unit of final demand.