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Local Economic Impact of COVID-19 on the Urban Tourism-Related Services: A Perspective of Kochi Heritage City, Kerala

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Abstract: The COVID-19 pandemic has had extremely distressful consequences for the service-providing industries, especially in the sector of tourism. The world is showing a move towards the recovery stage; however, the process has observed a lag in recovery because of a gap in the literature on measuring the local economic impact of COVID-19 on the employability of urban tourism. Therefore, this paper aims to investigate the economic impact of COVID-19 on the local market and other tourism-related services in Kochi Heritage City, Kerala. Quantitative research was performed based on stratified sampling with a questionnaire survey among 398 respondents. Data were analyzed descriptively to evaluate the impact and measure the significant difference statistically through a one-sample *t*-test and a one-way ANOVA. Findings revealed that employability from tourism-related services has observed an adverse impact of COVID-19 by a dip in the local economy in terms of earning reduction, whereas the impact on jobs and reduction in working hours were lopsided. Hence, in identifying the effect of COVID-19 on urban tourism and its sub-scaled classes, it contributes more effectively by intervening with recovery and supporting the local economy through a balanced allocation of financial assistance to the economic dip in Kochi.

Keywords: urban-tourism; COVID-19; local economic impact; Kochi

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1. Introduction

Cities are considered the center for the regeneration of the economy and contribute to making them functionally stable. In the case of heritage cities around the globe, they act as new opportunities for socio-economic regeneration in terms of commercial, industrial, leisure, and artistic recreational activities, which serve as the most popular tourist destinations throughout the regime of history of art and architecture [1]. In the progression of the COVID-19 pandemic, the global tourism industry gets shocked and therefore, the local economy of the region has observed a decline in most of the tourism cities [2–4]. Thus, the adverse effect of this phenomenon causes a decline in the popularity of travel and tourism among international travelers [5]. Similarly, in the case of Kochi Heritage City, the tourism industry itself contributed approx. 12.41% of the state's GDP and 23.5% of total employment. However, due to the pandemic, an economic meltdown has been observed, which causes socio-economic stress in the community and thus impacts the travel and tourism sectors broadly. This paradigm shifts in travel interest among visitors has a direct impact on urban tourism and its service providers.

By the end of 2019, which was before the pandemic, the economic flow and the earnings from tourism globally were recorded as the most in-demand sector in economic regeneration, whether it is urban or rural, which has been recorded as 10.6% of total employment (334 million jobs), 10.4% of global GDP (approximately USD 9.2 trillion), and in terms of expenditures, a total of USD 1.7 trillion of spendings (27.4% of global service exports) has been recorded from international visitors around the world [6–8]. However, urban economies account for nearly 80% of the world's GDP [9], and urban tourism is considered as the most crucial player for urban economic regeneration. Hence, it has been proven that the tourism sector has shown a great opportunity in terms of local economic growth through an increase in foreign exchange earnings, job creation, attracting new investors, and other service-related developments in the region [1]. Although, due to the COVID-19 global lockdown and thus travel restrictions for only one year from 2019 May to 2020 May, a sharp drop in international tourist arrivals (ITA), i.e., a 98% drop in ITA, has been recorded [10]. Consecutively, for global domestic tourism, there has been a huge fall of 45% in visitor spending, while spending drops of 69.4% on international visitors by 69.4% have been considered another concern for tourism-related service providers [6]. Another economic report released by the World Travel and Tourism Council (WTTC) in reference to the Oxford Economics Review stated that, in 2020 only, the tourism sector recorded a loss of approx. USD 4.7 trillion of the local economy, in which global GDP recorded a fall of 49.1%, i.e., from 10.6% to 5.5%, and also affected the job-providing sector, where a total of 62 million jobs were lost [7]. This has shown an inordinate stress on the local economy for urban tourism and their service providers.

According to Jennings [11], "Tourism" is the art of composite activities and industries that deliver a travel experience, such as transportation, accommodations, eating and drinking establishments, shops, entertainment, leisure activities and facilities, and other hospitality-related services available for individuals or groups that are traveling away from home, where urban tourism encompasses all providers of visitors and visitor-related services. In addition, urban tourism has always been considered the concentration of tourist attractions and related services in a compact urban place, and it is based on the minds of the average "psycho-centric" and "mid-centric" tourists today when they are choosing the destinations to travel [12]. Hence, urban tourism has been promoted as a functional outcome of tourism-related services for the progressive socio-economic development of the region [13]. Similarly, Kochi Heritage City is another example of urban tourism that is known for its heritage, art, and culture. Therefore, the local economy of Kochi has always been dominated by tourism and tourism-related services. However, due to the great stress of the pandemic, the tourism industry and related services have faced a transitional shock and observed an economic dip in the region (refer earnings from Tourism 1 and 2).

Thereby, in Kochi Heritage City, Kerala, India, the local economy has been highly affected due to this minacious wave of the COVID-19 pandemic, which has impacted urban tourism and its service-providing stakeholders innumerably. The first case of the COVID-19 pandemic in Kerala was confirmed on 30 January 2020 in Thrissur district, which was the first COVID case in India [14]. And after an increase in cases in the state, the Government of Kerala announced a complete lockdown in the state, thus directly affecting the economy of the state because more than 30% of the state's GDP is dominated by the tourism industry and related services. Therefore, the job market of the state, and in Kochi City, where the local economy of the city is based on tourism and related services only, has been highly impacted due to this uncertain lockdown [15]. Hence, this paper tends to answer the one prime question, "to what extent local economy based on urban tourism-related services of Kochi city has been affected due to COVID-19?". The question therefore provides an assessment map for the local economic impact of the pandemic on such tourism-related services, which explores the objective of the research. Therefore, the objective of this study is to evaluate the impact of COVID-19 on the tourism cluster on local economic development and the competitiveness and sustainability of tourism-related services in Kochi Heritage City, Kerala.

2. Literature Review

This section reviews the key issues related to studies that quantify the economic impact of the COVID-19 pandemic on travel and tourism industries globally and, thus, particularly tries to reflect on current research in India to provide a better understanding of how tourism-related services and other businesses in developing countries have been affected by this crisis and suffered economically.

In many studies, it is discussed that, during the end of the 20th century and the beginning of the 21st century, the world experienced a paradigm shift in economic regeneration from manufacturing to a service-providing sector [1,16–19]. The service sector has now accounted for approx. 61.2% of the world's GDP [20], of which more than 50% are related to travel and tourism-related services, which account for around 50% of the total global employment [1,6]. Thereby, the tourism and hospitality industries, based on their service-oriented and labor-intensive nature, have indicated that tourism-related services and their economic regeneration have played a critical role in this transition.

Thereafter, the UNWTO report emphasized that during 2010–2019 in the G20 countries, tourism services played a key role in job creation and thus economic generation [9]. It is further stated that, in reference to service-providing countries, especially in developing countries, for the tourism sector, employment in the hotel industry and food and beverage services showed a predominant growth of three folds faster than other sectors [1]. A study was performed in 14 countries in Asia and the Pacific by the International Labor Fund (ILF), which suggested that 15.3 million people work in tourism-related services, and the majority of the jobs in these countries are associated with urban areas [21], and thus urban tourism.

Although the hospitality and tourism sectors across the world, especially in tourism-related service-providing nations, have also suffered enormously due to COVID-19. Huynh, et al. [22] mentioned that large enterprises based on hospitality and tourism are likely to be more resilient to the effect of COVID, whereas small-scale tourism-related businesses have been considered at high risk of shutdown or even bankruptcy and are more vulnerable to local economic loss. Moreover, there is a gap in information related to the impact of COVID-19 on urban tourism-related services that is more dominantly concentrated in densely populated urban areas, where tourism-related services have been extremely affected by COVID-19 [1] and thus recorded a local economic shock because of the crisis and then recession in urban tourism-related services and job loss [22]. Therefore, the loss of jobs in such service-oriented businesses not only creates financial restrictions and social inequalities in terms of poverty, unequal social justice, and crime but also includes socio-economic and psychological distress [1,23].

The tourism and related service sectors in Asia, and more specifically in Kerala, have also suffered enormously during the initial hit and the consecutive waves of the COVID-19 pandemic. It has adverse effects from the pandemic in terms of unemployment, socio-economic depression, bankruptcy, revenue loss, and other budget deficits [24]. Therefore, the impact of COVID-19 on the tourism-related services in Kochi Heritage City, Kerala, is considered a major concern because the crisis has expressed a wide range of local economic downturns and thus has shown a profound effect on the local urban ecosystem [15,25].

The most adverse effect of COVID-19 is not only limited to destruction for the travel and tourism industry but also to tourism-related services and their supporting sectors [1]. Some researchers have mentioned that, in Kerala, the hardest impact of the COVID-19 pandemic has been more distressful on the workers of hospitality and tourism-related services such as performing arts and entertainment, restaurants, motels, and hotel businesses, art and craft industries, and other related local markets in comparison to other tertiary jobs like administrative and programming [15,25], thus resulting in increased inequalities and poverty at the highest risk in the region [24]. It is supported by Gössling, who stated that, in developing economies, the negative impact of the crisis is greater on the tourism-related supporting sectors [26]. However, some researchers also consider this pandemic an opportunity to rethink the trend of development and service providers. From the perspective of urban economic development, Zhang and Xing [27] discussed the evolution of a new type

of urbanization, which explains the prompting effect of the tourism economy with regional heterogeneity in coastal cities of China in post-pandemic development.

The impact of COVID-19 on the adventure travel and tourism industry, especially in Nepal, where tourism-dependent communities strive from crisis, was projected as an opportunity to rejuvenate the community for adventure activities, which was previously exploited heavily and is highly vulnerable [28]. Similarly, Sumanapala and Wolf [29] supported the statement through the EIA for a Sri Lankan National Park, as demonstrated by COVID-19 as an opportunity that provided temporary relief due to travel restrictions and can be utilized for long-term opportunities globally. In addition, some studies talk about the pandemic as having wonderful scope towards sustainable global economic regeneration, where it was discussed that the frequent lockdown and an on-and-off market have shown a direct impact on the global market; however, some recovery models based on reinvention of tourism-services-providing sectors worked as an opportunity towards rethinking from traditional set-up to upgraded initiatives for sustainable tourism [30–32]. Consecutively, Bhatta [33] also suggested that COVID-19 is a motivational tool to restructure the travel and tourism services, providing sectors in post-recovery destination-based tourism and providing a low-risk travel environment.

However, the recent trend of research on the impact of COVID-19 has shown an evaluation of the general impact on travel and tourism industries and related service sectors, which are more focused on airlines, accommodation services, restaurants, café, and bars [1,4,7,26,34], while the specific impact of this pandemic on the tourism-related supporting service providers has been least acknowledged and the effects on tourism-related services in cities have received little attention [1,15]. Therefore, urban tourism is considered an intrinsically service-oriented industry, and its supporting services such as art and craft bazaars, hotels and stays, catering and restaurants, and leisure and sports activities are the labor-intensive sectors that act as the job-creating sector for the local economy, especially for women, youth, and migrant workers [1]. Moreover, in most developing nations, like India, urban tourism-related services have been adopted as a major source of the local economy in terms of employment and income generation, where the rate of urbanization has been observed at a rapid pace. And any such unavoidable crisis and intense shutdown of tourism-related services would push millions of people into an extremely dilapidated living status. Therefore, to address these issues, this paper aims to examine the local economic impact of the COVID-19 pandemic on tourism-related services, specifically in Kochi Heritage City, Kerala.

3. Data and Settings

3.1. Settings

In this research, Kochi Heritage City has been adopted as the study area. It is situated in the southwest of Kerala. Kerala, a southern state in India, is known as one of the most beautiful tourist destinations in the world, and it is named one of the Ten Paradises of the Earth by National Geographic Traveler (2012) [35]. It is located along the Malabar coast of Western Ghat. The state is well known for its rich heritage and pluralistic culture. Therefore, Kerala is the first state in India to launch itself as a brand in the tourism sector, contributing the highest percentage of the state's GDP through tourism-related services. The tourism sector is therefore considered the most significant for the state's economy. On realizing the economic potential of tourism and related services, the Government of Kerala declared tourism an industry in 1986. Therefore, the significance of tourism is considered most important for the state's urban settlement since it has won many national and international tourism awards in the last few decades.

Kochi, previously known as *Cochin*, is a city situated in the Ernakulam district of Kerala (Figure 1), which is the administrative headquarter. It is well known as the "Queen of the Arabian Sea". The strategic location of the city plays a very significant role in its economy, as it is located at the sea mouth of seven major rivers in the state. Thereby, Kochi is also known as the commercial capital and the most cosmopolitan city of Kerala [36].

Geographically, the Kochi Heritage City covers about 330 km^2, including the core city and the surrounding urbanizing areas. It is surrounded by the wetland of the Vembanad estuary and, from the west, by the Arabian Sea, and thus became the closest junction for the "Lakshadweep Islands", which are considered the most in-demand assets of tourism. Hence, as the administrative setup, Kochi encompasses an area under the Greater Cochin Development Authority (GCDA) which consists of six municipalities and 25 panchayats covering an area of 632 km^2. The city has 74 wards within 7 administrative zones.

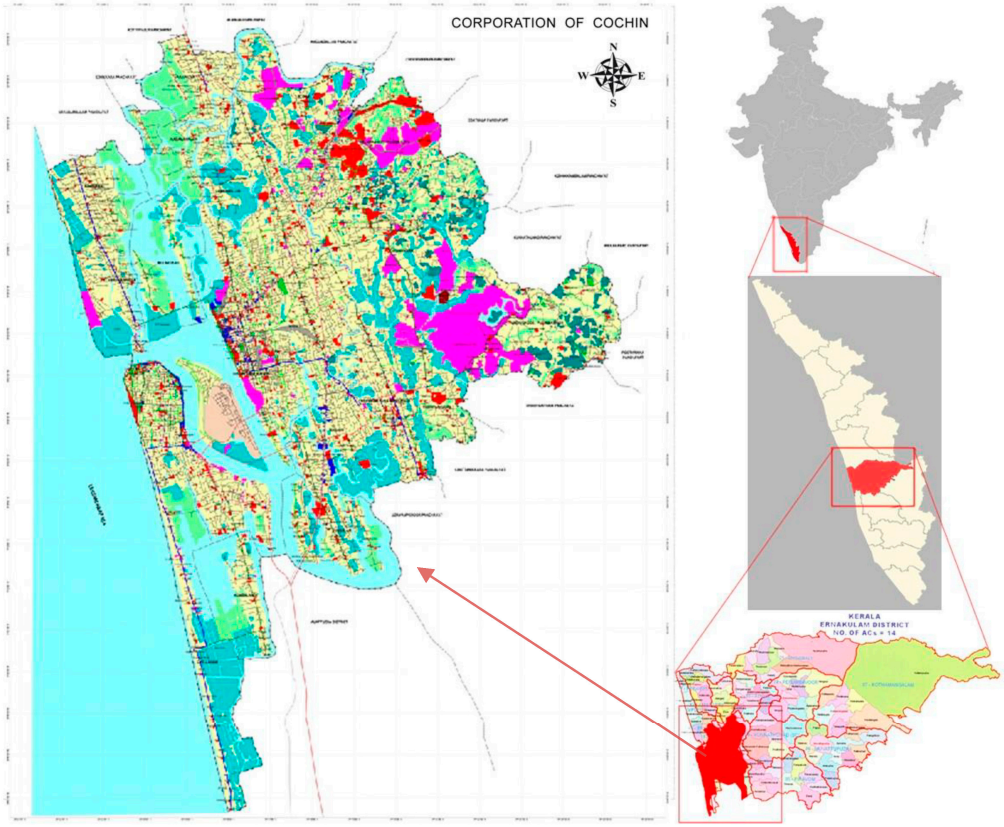

Figure 1. Location Map of Kochi City, Kerala, India. Source: Author's synthesis from [37].

Kochi has recorded consistent growth and reached the category of million plus UA/city. It is developed with a unique demographic feature where the state observes a uniformly interspersed concentration of dwellings that make Kochi a remarkable urbanized city in Kerala [38]. As per the 2011 census, Kochi (Ernakulam), however, has the highest urban population, which consists of about 45% of the total state's urban population. The population of Kochi city is 602,046 (corporation limit) with an area of 94.88 km^2. However, the total population of Kochi UA/Metropolitan region is 2,119,724 with an area of 440 km^2.

Historically, Kochi has always been special for its heritage settings and pluralistic culture, which are directly influenced by its evolution [39]. In the annals of history, the region in Kerala is imprinted in golden letters; its spices make the most and deepest impact [39,40]. Thereby, the city has had an important place on the world map for voyagers and traders over the centuries as it developed as an important port for traders around the world [41]. Hence, city houses date back more than 2000 years in history with the evolution and development of the region [42]. Progressively, in the late 1980s, the city of Kochi evolved as a hotspot for tourism destinations and achieved popularity among travelers all around the world. Therefore, in the last two decades, Kochi Heritage City has come up as the fastest-growing urban region in the sector of tourism and related services. However, in early 2020, COVID-19 was declared a global pandemic by the World Health Organization, which thus announced a partial and then complete lockdown at every tourism destination around the world. Hence, it causes a tourism influx shock and leads to

a global economic depression [43], and more specifically, Kochi started to taste the bitter side effects of COVID-19 on the local economy.

3.2. Tourism Statistics in Kerala and Kochi, Investment and Earnings

Being the commercial capital of the Malabar coast region of India, Kochi is famous for a variety of traditional and modern activities that promote tourism in the region [44]. Before the pandemic, Kerala tourism contributed 12.41% of the state's GDP and 23.5% of total employment; however, after the hit of COVID-19, the tourism sector and related services have observed a remarkable fall. Tables 1 and 2 have described the tourism statistics and the pattern of earnings from tourism-related service sectors. Tourism statistics elaborated on the tourism flux of foreign tourist arrival and domestic tourist arrival that helps in accounting for the growth and trends of tourism in the city.

Table 1. Tourism Statistics of Kerala and Ernakulam districts (Kochi): 2009–2021.

	Kerala						Ernakulam District (Kochi)					
Year	**Total No. of Tourists**	**% Increase**	**Foreign Tourist**	**% Increase**	**Domestic Tourists**	**% Increase**	**Total No. of Tourists**	**% Increase**	**Foreign Tourist**	**% Increase**	**Domestic Tourists**	**% Increase**
2009	8,470,795		557,258		7,913,537		2,058,112		239,364		1,818,748	
2010	9,254,340	9.25	659,265	18.31	8,595,075	8.61	2,265,418	10.07	277675	16.01	1,987,743	9.29
2011	10,114,440	9.29	732,985	11.18	9,381,455	9.15	2,478,100	9.39	308,674	11.16	2,169,426	9.14
2012	10,870,550	7.48	793,696	8.28	10,076,854	7.41	2,682,021	8.23	330,390	7.04	2,351,631	8.4
2013	11,715,954	7.78	858,143	8.12	10,857,811	7.75	2,897,887	8.05	352,314	6.64	2545573	8.25
2014	12,618,777	7.71	923,366	7.6	11,695,411	7.71	3,097,715	6.9	372,997	5.87	2,724,718	7.04
2015	13,443,050	6.53	977,479	5.86	12,465,571	6.59	3,281,537	5.93	383,643	2.85	2,897,894	6.36
2016	14,210,954	5.71	1,038,419	6.23	13,172,535	5.67	3,480,812	6.07	407,653	6.26	3,073,159	6.05
2017	15,765,390	10.94	1,091,870	5.15	14,673,520	11.39	3,739,061	7.42	453,973	11.36	3,285,088	6.9
2018	16,701,068	5.94	1,096,407	0.42	15,604,661	6.35	3,935,064	5.24	488,175	7.53	3,446,889	4.93
2019	19,574,004	17.2	1,189,771	8.52	18,384,233	17.81	4,582,366	16.45	522,232	6.98	4,060,134	17.79
2020	5,329,727	−72.77	340,755	−71.36	4,988,972	−72.86	1,238,152	−72.98	134,952	−74.16	1,103,200	−72.83
2021	7,596,104	42.52	60,487	−82.25	7,535,617	51.05	1,634,703	32.03	46,821	−65.31	1,587,882	43.93

Source: Author's synthesis from Tourism Statistics 2009–2021, Department of Tourism, Government of Kerala, India.

Table 2. Earnings from tourism and related services from 2010 to 2021 (₹ in crore).

	Kerala				
Year	**Foreign Exchange Earnings (₹ in Crore)**	**% Increase**	**Earnings from Domestic Tourists (₹ in Crore)**	**Total revenue Generated from Tourism (Direct and Indirect) (₹ in Crore)**	**% Increases**
2010	3797.37	33.09		17,348	31.12
2011	4221.99	11.18	10,131.97	19,037	9.74
2012	4571.69	8.28	10,883	20,430	7.32
2013	5560.77	21.63	11,726.44	22,926.55	12.22
2014	6398.93	15.07	12,981.91	24,885.44	8.54
2015	6949.88	8.61	13,836.78	26,689.63	7.25
2016	7749.51	11.51	15,348.64	29,658.56	11.12
2017	8392.11	8.29	17,608.22	33,383.68	12.56
2018	8764.46	4.44	19,474.62	36,258.01	8.61
2019	10,271.06	17.19	24,785.62	45,010.69	24.14

Table 2. *Cont.*

Kerala					
Year	**Foreign Exchange Earnings (₹ in Crore)**	**% Increase**	**Earnings from Domestic Tourists (₹ in Crore)**	**Total revenue Generated from Tourism (Direct and Indirect) (₹ in Crore)**	**% Increases**
2020	2799.85	−72.74		11,335.96	−74.81
2021	461.5	−83.517		12,285.91	8.38
Ernakulam district (Kochi)					
Year	Foreign Exchange Earnings (₹ in Crore)	% increase	Total revenue generated from Tourism (direct and indirect) (₹ in Crore)		% increases
2017	3489.24	13.36	9541.64		14.84
2018	3902.37	11.84	10,533.78		10.4
2019	4508.32	15.53	12816.5		21.67

Source: Author's synthesis from the Economic Review Report 2010–2021, Department of Tourism, Government of Kerala, India.

Up to 2019, a sharp growth in tourist influx has been recorded for both foreign and domestic tourists. However, in the years 2020 and 2021, the trend of tourist influx has dropped dramatically because of the COVID-19 pandemic lockdown and travel restrictions. Table 1 shows a drop in foreign tourist arrivals (FTA) by −71.36% in 2020 and −82.25% in 2021 in Kerala state; however, domestic tourist arrivals recorded a drop of −72.86% in 2020, whereas in 2021 it was recorded with a rate of recovery in domestic tourism, which was observed as a rate of +51.05% from the previous year. In the case of Ernakulam (Kochi) tourist statistics, in the year 2020, there was a fall of −74.16% of foreign tourist arrivals and −72.83% in the year 2021. However, for the year 2021, FTA was recorded at −65.31%, whereas domestic tourists were recorded at +43.93%.

Similarly, Table 2 shows an average income from all means of tourism-related services, which potentially depends on the percentage share of visitors. It has been observed that, up to 2019, the local economic earnings were progressively increasing; however, due to the COVID-19 lockdown, a prominent fall in earnings has been recorded, which shows the direct impact on the local economy due to the great pandemic breakdown.

3.3. Study Procedure

In this study, an explanatory research design based on a questionnaire survey research approach is being used to validate the adopted quantitative research method. Therefore, this study is based on a quantitative methodology to satisfy the objective of the research. This paper is a sub-section of the proceeding research on the assessment of public participation in tourism-related urban regeneration that signifies the social and environmental impact concerning the level of social acceptance that ensures the extent of local participation in such government-based socio-economic development programs. Hence, a survey questionnaire has been used as an instrument for data collection. The questionnaire was designed in such a manner that it can assess the local economic impact of COVID-19 on the tourism industry and related services, which was based on the perceptions of respondents. It is designed using a 5-point Likert scale through which the participants were asked to rate their perception of the impact of COVID-19, which ranges from 1 (least or zero affected) to 5 (strongly affected). The survey was targeted at their earnings, jobs, and working hours. An analysis has been conducted by two experts in order to check the item's reliability. Furthermore, the validity test and reliability test have been performed to examine the value of internal consistency (Cronbach's alpha). Before the final administration of the survey questionnaire, it had been pre-tested using 30 participants (28 effective) as a pilot case study to ensure that the instrument of data collection was reliable and valid. The respondents were divided into three major categories: planning officers (PO), leaders of the community (LC), and local stakeholders (LS). The study has been performed during July-November

2021 and Jan-Feb 2022 at Kochi Heritage City, Kerala, India, during travel restrictions and the partial lockdown of the state.

3.3.1. Sampling Procedure and Sample Size

Sampling could be considered a process of selecting part of a given population to represent a whole population in collecting data for a study [45]. Therefore, in this study, a purposive sampling method has been adopted, which was further illustrated with stratified and random sampling methods to justify the nature and typology of each stratum. The target population for the study area has been adopted as the stakeholders of the tourism-related service providers in Kochi City where it is further stratified accordingly (see Table 3). For the sample size, it was suggested by Chado [46], which is based on Bartlett [47] and Krejcei and Morgan [48]. This study adopted a sample size of 398 respondents (based on Krejcei and Morgan's sample size table), which is incorporated with 5.0% as a margin error with a 95% confidence level (refer to Table 4). Therefore, for stratified sampling, the proportional sample size formula suggested by Cochran [49] has been incorporated to calculate the evenly distributed samples from each stratum.

Table 3. Sample stratification and classification of tourism-related services in Kochi.

Tourism-Related Services	Description/Subclass	Total No.	Stratified Sample Size
Mode of transport			
Railway	Passenger rail transport, interurban	14	3
Roadways	Local roadways bus and coach charter services	18	4
	Rental service of passenger cars with operator	58	13
Air passenger	Domestic air transport service	16	4
	International air transport service	8	2
Waterways	Boats and ferry services	12	3
Food serving activities	Restaurants	340	79
	Traditional restaurants	267	62
	Eateries	42	10
Accommodation for visitors	Hotels	130	30
	Lodging/hospice/hostels	87	20
	Motel	122	28
	Self-catering apartments	20	5
	Boarding house	8	2
Tour and Travel agencies	Travel agency activities	31	7
	Tour operator activities	97	23
Cultural activities	Historic sites and buildings	337	78
	Museums activities	4	1
Sports and recreational activities	Sports and recreational facilities operation services	12	3
Retail trade of Souvenirs	Skilled workers and Local Stakeholders	92	21
	Total	1715	398

Table 4. Survey brief.

Target Sample	All Stakeholders (Tourism-Related Service Providers) Aged 18 and above
Sample unit	Individual survey
Location	Kochi Heritage City, Kerala
Methodology	Questionnaire survey with a structured questionnaire
Sample size	398 (387 valid interviews)
Sampling error	±5.0% (consideration)
Significant level	95% as (i = 0.5)
Survey time	July–November 2021 and January–February 2022.

3.3.2. Data Analysis

For the analysis of data, the method of descriptive statistics such as mean, mode, frequency, and percentage were used to explore and understand the respondent's demographic characteristics and level of perception, along with the possible percentage of responses towards the local economic impact of COVID-19, and it has been identified using SPSS 27v. Thereafter, on validation, inferential statistics like a one-sample *t*-test followed by a one-way ANOVA (one-way analysis of variance) were used to examine the perceived impacts and measure statistically significant differences. Hence, the assumption of normality of the data distribution has been checked and validated by assessing the values of skewness and kurtosis, and thus Cronbach's α values were calculated for checking reliability, i.e., the internal consistency of the instrument. Thereby, the local economic impact of COVID-19 on travel and tourism-related services was measured by three varied items: a reduction in local earnings, a reduction in working hours, and job losses (refer to Table 5). The assumptions were analyzed, and the values of Cronbach's α coefficients for the above-mentioned three varied components ranged from 0.630 (lowest) to 0.901 (highest), whereas the total scale of reliability was measured at 0.833, which has been proving the reliability (internal consistency) of the itemized instrument [50]. The α value closer to one (1) considers higher internal consistency reliability, while the α value <0.60 is considered to be poor, and therefore, a value >0.70 is most preferred [50,51]. In Table 5, the values of Skewness and Kurtosis showed a normal distribution of varied items of the data.

Table 5. Assessment of varied items for measures of means, standard deviation, skewness, and kurtosis.

Items for Impact Assessment	N	Mean	SD	Skewness		Kurtosis	
				Value	SE	Value	SE
• Reduction in local earnings	398	4.12	1.637	−0.647	0.130	0.218	0.261
• Reduction in working hours	398	3.02	1.920	−0.112	0.130	−1.218	0.261
• Job losses	398	3.81	1.792	−0.316	0.130	−0.926	0.261

Note: SD—standard deviation; SE—standard error.

4. Results

4.1. Characteristics of Respondents

The respondents were from Kochi City based in two urban areas, Fort-Kochi and Mattancherry, targeted by travel and tourism-related service providers, which are further presented in sub-categories for a total of 398 effective responses. Therefore, the representation of the overall demographic characteristics of the respondents is stated as gender, age, education level, marital status, and employment nature (Table 6). Hence, the total number of respondents was 398, consisting of 61.31% males and 38.69% females, respectively. According to the 2011 census of India, Kochi's population was nearly equal in sex ratio; however, the percentage of respondents varied, with a higher proportion of male respondents than female respondents. This is because of cultural aspects of the community,

where most of the time in Indian culture, a male member is considered the head of the family, and a limitation of language because they prefer the local speaking language for communication. For age group, the majority were from 46 to 60 years (41.96%), followed by 36–45 years (33.42%), 26–35 years (15.58%), and above 60 years (4.77%), which was considered a retired but most elite group of respondents because their responses were most accurate and reliable. In addition, the majority of respondents, i.e., 60.55%, were educated up to tertiary level. In the case of marital status, 80.15% of respondents were married. Similarly, with employment status, it was distributed evenly, where 45.48% were from the private employment category, 20.85% were from public employment, and 28.89% were from the business-related category.

Table 6. Profile of the respondents.

Demographic Features		PO		LC		LS		Total	
		Freq	%	Freq	%	Freq	%	Freq	%
Gender	Male	24	68.57	27	72.97	193	59.20	244	61.31
	Female	11	31.43	10	27.03	133	40.80	154	38.69
Age	18–25	0	0.00	2	5.41	15	4.60	17	4.27
	26–35	1	2.86	7	18.92	56	17.18	62	15.58
	36–45	14	10.00	11	29.73	108	33.13	133	33.42
	46–60	15	42.86	16	43.24	136	41.72	167	41.96
	Above 60	5	14.29	1	2.70	13	3.99	19	4.77
Marital status	Married	32	91.43	28	75.68	259	79.45	319	80.15
	Not-Married	1	2.86	8	21.62	49	15.03	58	14.57
	Others	2	5.71	1	2.70	18	5.52	21	5.28
Education level	Secondary	0	0.00	1	2.70	13	3.99	14	3.52
	Higher-Secondary	12	34.29	18	48.65	110	33.74	140	35.18
	Tertiary	23	65.71	18	48.65	200	61.35	241	60.55
	Non-formal	0	0.00	0	0.00	3	0.92	3	0.75
Employment status	Public	11	31.43	22	59.46	50	15.34	83	20.85
	Private	16	45.71	5	13.51	160	49.08	181	45.48
	Business	4	11.43	8	21.62	103	31.60	115	28.89
	Not employed	0	0.00	1	2.70	7	2.15	8	2.01
	Retired	4	11.43	1	2.70	6	1.84	11	2.76

4.2. Understanding of Respondent's Perceptions on Local Economic Impact of COVID-19 on Tourism-Related Services

From the review of the survey analysis, it indicates that the local economic impact of COVID-19 on travel and tourism-related services was highly affected and was measured by three sets of impact variables (refer to Table 7). In this study, for the measurement of the local impact of a pandemic on the tourism industry, travel and tourism-related services from Kochi were categorized into ten major categories and further subcategorized into 20 subclasses (refer to Table 3). Thus, for impact analysis, a group comparison was performed that helped in understanding the differences in the perception of respondents in terms of different subclasses related to their categories.

Table 7. Observed local economic impact of COVID-19 on travel and tourism-related services in Kochi City, Kerala.

Tourism-Related Industries	Subclass	Impact Variables ***	N	Mean Score **	SD	t	*p*-Value *	Total Impact (Mean)		
								Q1	Q2	Q3
Mode of transports										
Railways	Passenger rail transport, interurban	Q1	3	4.23	0.96	2.89	0.422	4.10	2.87	1.66
		Q2		3.51	1.02	−1.00	0.500			
		Q3		1.70	0.79	−1.03	0.304			

Table 7. *Cont.*

Tourism-Related Industries	Subclass	Impact Variables ***	N	Mean Score **	SD	t	*p*-Value *	Total Impact (Mean)		
								Q1	Q2	Q3
Roadways	Local roadways bus and coach charter services	Q1	4	4.07	1.42	5.00	0.017	3.80	3.18	3.22
		Q2		3.89	1.22	3.89	0.086			
		Q3		3.43	0.86	−2.10	0.102			
	Rental services of passenger cars with operator	Q1	13	4.11	1.03	3.00	0.042			
		Q2		3.03	1.50	2.89	0.103			
		Q3		4.00	1.34	8.11	0.050			
Air passengers	Domestic air transport services	Q1	4	4.73	0.60	4.01	0.000	4.70	2.91	4.43
		Q2		3.66	0.54	6.89	0.020			
		Q3		4.67	1.14	−1.84	0.331			
	International air transport services	Q1	2	4.89	0.78	7.00	0.025			
		Q2		4.11	0.80	3.30	0.064			
		Q3		4.70	1.00	−4.00	0.103			
Waterways	Boats and ferry services	Q1	3	4.02	0.62	4.00	0.001	3.89	2.75	3.70
		Q2		3.11	0.74	7.01	0.010			
		Q3		4.10	1.14	−1.89	0.036			
Food serving activities	Restaurants	Q1	79	4.78	1.41	7.86	0.012	4.75	3.21	4.05
		Q2		3.23	0.92	4.33	0.004			
		Q3		4.21	0.61	1.02	0.133			
	Traditional restaurants	Q1	62	4.66	1.89	7.01	0.010			
		Q2		2.98	1.60	6.00	0.029			
		Q3		1.81	1.22	0.89	0.141			
	Eateries	Q1	10	4.01	1.78	8.61	0.000			
		Q2		2.68	1.42	4.31	0.000			
		Q3		3.89	0.92	1.01	0.063			
Accommodation for visitors	Hotels	Q1	30	4.77	1.08	17.01	0.010	4.71	3.30	4.10
		Q2		3.11	1.12	6.08	0.000			
		Q3		4.28	1.02	2.89	0.032			
	Lodging/hospice/hostels	Q1	20	4.38	1.11	5.04	0.011			
		Q2		3.82	1.30	0.82	0.000			
		Q3		4.41	0.91	−1.96	0.141			
	Motels	Q1	28	4.07	0.98	7.01	0.000			
		Q2		3.11	1.02	−2.21	0.166			
		Q3		4.18	0.93	−1.37	0.050			
	Self-catering apartments	Q1	5	4.80	0.53	4.00	0.057			
		Q2		2.18	0.58	6.09	0.011			
		Q3		4.01	1.00	−1.72	0.225			
	Boarding-houses	Q1	2	3.80	0.98	0.00	0.300			
		Q2		1.86	1.03	−6.01	0.015			
		Q3		2.37	1.02	−8.00	0.048			
Tour and Travel agencies	Travel agency activities	Q1	7	4.73	0.91	6.00	0.002	4.27	4.00	4.33
		Q2		4.10	1.02	−2.11	0.117			
		Q3		4.81	0.90	1.02	0.000			
	Tour operator activities	Q1	23	4.50	0.75	12.14	0.000			
		Q2		2.61	0.69	−1.02	0.011			
		Q3		3.34	1.02	2.11	0.000			

Table 7. *Cont.*

Tourism-Related Industries	Subclass	Impact Variables ***	N	Mean Score **	SD	t	*p*-Value *	Total Impact (Mean)		
								Q1	Q2	Q3
Cultural activities	Historical sites and buildings	Q1	78	3.88	1.44	7.01	0.023	3.20	1.11	1.33
		Q2		1.36	1.02	−4.00	0.050			
		Q3		1.41	0.98	−6.08	0.112			
	Museums activities	Q1	1	3.45	1.21	1.02	0.500			
		Q2		1.09	0.87	−2.14	0.115			
		Q3		1.31	0.87	0.98	0.130			
Sports and recreational activities	Sports and recreational sport facility operation services	Q1	3	4.31	0.84	4.00	0.050	4.33	3.30	4.21
		Q2		3.70	0.75	−1.00	0.112			
		Q3		4.50	0.75	1.12	0.000			
Retail trade and Souvenirs	Skilled workers and local stakeholders	Q1	21	4.91	1.01	4.01	0.010	4.82	3.76	4.83
		Q2		3.98	1.75	−1.02	0.211			
		Q3		4.93	0.98	0.54	0.200			

Note: * *p*-value = 0.05, ** Likert scale from least or zero affected (1) to strongly affected (5), *** Q1: reduction in local earning; Q2: reduction in working hours; Q3: job loss.

Thereby, on analyzing the local economic impact in terms of earnings and revenue regeneration (refer to Table 8), the local stakeholders of tourism-related services in Kochi City perceived that the COVID-19 pandemic has shown a deep impact on the travel and tourism industry of Kerala, India. The result reveals that the total local economic impact with mean values for the stakeholders of "retail trade of souvenirs" (m = 4.82), "food serving activities" (m = 4.75), "hotels and accommodation" (m = 4.71), and "air passenger transports" (m = 4.70) related services are the highly impacted industries in terms of local earning reductions. However, the conclusive results of the one-sample *t*-test for respective subclasses in terms of local earning reductions (Q1) were recorded as the comparison of other subclasses that achieved the mean score for skilled workers and other local stakeholders (m = 4.91 and $p = 0.010$), international air passenger transport services (m = 4.89 and $p = 0.025$), self-catering apartments (m = 4.80 and $p = 0.057$), restaurant services (m = 4.78 and $p = 0.012$), hotels (m = 4.77 and $p = 0.010$), domestic air passengers (m = 4.73 and $p = 0.000$), and travel agency activity (m = 4.73 and $p = 0.002$) was observed much greater than the expected mean (m = 3.2). Therefore, the result implies that these subclasses have shown the most depressive impact of COVID-19 in terms of revenue reduction.

Table 8. One-way ANOVA on the observed local economic impact of COVID-19 on tourism-related services in Kochi, Kerala.

One-Way ANOVA Analysis of Observed Local Impact of COVID-19 on Tourism-Related Services in Kochi, Kerala														
	Railway Passenger Transport	**Roadways Passenger Transport**	**Air Passenger Transport**	**Waterways Passenger Transport**	**Food Serving Activities**	**Accommodation for Visitors**	**Tour and Travel Agencies**	**Cultural Activities**	**Sports and Recre-ational Activities**	**Retail Trade and Souvenirs**	**ANOVA**		**Homogeneity of Variances**	
Observed Local Impact	Mean										F-value	*p*-value	Levene statistics	Sign. (*p*-value)
Reduction in local earnings	4.1	3.8	4.7	3.9	4.7	4.7	4.3	3.2	4.3	4.8	5.030	0.000	2.891	0.002
reduction in working hours	2.9	3.9	2.9	2.7	3.2	3.3	4.0	1.1	3.3	3.7	16.980	0.000	3.736	0.046
Job losses	1.7	3.1	4.4	3.7	4.0	4.1	4.3	1.3	4.2	4.8	23.170	0.000	2.104	0.000

Note: 95% confidence interval ($p = 0.05$).

The analytical results for the variable "reduction in working hours" (Q2) responses have revealed that the tour and travel agencies (m = 4.00), retail trade and souvenirs (m = 3.76), and hotel and accommodation services (m = 3.30) observed an effectively negative effect from COVID-19, whereas other categories have also noticed a negative impact but induced in nature. Hence, conclusively, the results of the one-sample *t*-test revealed that the individual subclass has obtained mean scores for international air passengers (m = 4.11 and $p = 0.064$), travel agency activity (m = 4.10 and $p = 0.117$), skilled workers and stakeholders (m = 3.98 and $p = 0.211$), local roadway bus and coach charters (m = 3.89 and $p = 0.086$), lodging/hospice/hostels (m = 3.82 and $p = 0.000$), and sports and recreational facility operation services (m = 3.70 and $p = 0.211$) are greater than the expected scores, which signifies that these classes were highly affected by COVID-19 in terms of reduction in working hours.

Similarly, the results for the variable "job losses" have concluded that the average mean score for retail trade and souvenirs (m = 4.83), air passenger transport (m = 4.43), tour and travel agencies (m = 4.33), sports and recreational activities (m = 4.21), and food service activities and hotel and accommodation services, respectively (m = 4.05 and 4.10), demonstrate the negative impact of the COVID-19 pandemic, and thus other services have also shown an induced but steady effect on job losses. A one-sample t-test has been performed, and the results concluded that the individual subclass has obtained a mean score for skilled workers and local stakeholders (m = 4.93 and $p = 0.200$), travel agency activities (m = 4.81 and $p = 0.000$), international air passengers (m = 4.70 and $p = 0.103$), domestic air passengers (m = 4.67 and $p = 0.331$), sports and recreational facilities services (m = 4.50 and $p = 0.000$), lodging/ hospice/hostels (m = 4.41 and $p = 0.141$), and hotel activities (m = 4.28 and $p = 0.032$), which are much higher than the expected mean scores (m = 3.2), hence signifies that these subclasses have been highly influenced by COVID-19 in terms of job losses.

Thereafter, another analytical method, "one-way ANOVA", was performed to assess the difference in perceptions of the respondents in all related categories of tourism-related services, which is shown in Table 8.

The results of the ANOVA have revealed that there is a huge and significant difference in the understanding and perception of the local economic impact of COVID-19 on tourism-related services in Kochi Heritage City, namely, reduction in local earnings ($p > 0.002$), reduction in working hours ($p > 0.046$), and job losses ($p > 0.000$) across all other tour and tourism-related services. Hence, related to other categories of services, it is concluded that it has been hardest hit by the pandemic in the local earning sector than other related components of tourism-related industries/services in Kochi City, Kerala.

5. Discussion and Conclusions

An analysis of all related sectors of the travel and tourism industries in Kochi Heritage City, Kerala, has concluded that the impact of the COVID-19 pandemic on the local economy of the region was highly influenced. The effect of lockdown has shown a direct impact on businesses and jobs that are related to the travel and tourism industry in any way; however, the impacts were not common across different sectors/actors of such tourism-related services, where few of them are still functioning and others are closed/shut down. The results have concluded that a large number of stakeholders were unable to meet their two ends (demand and supply), as shown by some adverse consequences on the "glocal" economy, especially on employment prospects.

Therefore, the study was more focused on the supply-side impacts than the demand side, because, due to the over-extended lockdown in Kochi, the travel and tourism industries and related services have been measured on a float, and thus businesses were observed in a great depression, resulting in a local economic meltdown. It has been confronted that, to overcome such a socio-economic shock with a cautious clientele, travel and tourism businesses and related services must be restored with confidence. It is supported by many studies, which suggested some theoretical measures that are beneficial in the long term

globally. Hence, the main objective of this research is to examine the local economic impact of a pandemic on tourism-related services and understand the behavior of service providers that helps to reconsider those related services with an appropriate strategy in the process of recovery from the crisis. And thus, considering this pandemic as another opportunity to regain their travel and tourism status sustainably.

The COVID-19 pandemic hit the industry in a series of impact waves. The result concluded that during the first wave of the pandemic, businesses and tourism-related services were directly affected and thus reduced by nearly 90% of the local economy, where some of them (around 20% of tourism-related enterprises) and businesses-providers temporarily closed their businesses, hence impacted the city economy, because Kochi city is well known for tourism and based on tourism-oriented services as the main source of local economic generation. The evidence from the result revealed that there is an increase in concerns about the temporary closure or shutdown of many different sector/service providers due to a sharp drop in tourism demand, which causes direct disruption of the supply chain for the whole travel and tourism system.

Similarly, the evidence also revealed that the local enterprises (urban tourism-related service providers) were under great stress due to uncertain revenue loss, which was recorded at a fluctuating rate of 50% to 90% depending on the nature of the service providers. It has shown that the hardest hit of COVID-19 is a reduction in local economic regeneration. However, the result was also observed by [52,53], and it was even worse than the recommended outcomes. It is also confirmed by the study of Varghese et al. [25] on the tourism business crisis in Kerala, which reported a huge decline in tourism revenue compared to the pre-pandemic era (refer to Table 4). Hence, it is suggested that, for hotel industry crisis management in post-pandemic recovery, service providers could provide supplementary accommodation choices as an alternate solution to accomplish the goal of tourism success [25]. This result expresses the serious effects of COVID-19 on tourism-related sectors on a global scale [54].

In terms of providing tourism services, nations, like European nations, Asian countries, some Middle Eastern nations, and so on, act as key pillars of the urban economy, which signifies urban tourism. Urban tourism has been considered the most service-oriented and extremely labour-intensive sector that played a prime role in the era of such a transition [1,54]. Therefore, the outbreak of the pandemic has affected the major sector of the labor force in India and had a depressive impact on job-providing sectors/agencies, especially in tourism-related sectors, which were declared at high risk for local socio-economic constructs [55]. The pandemic crisis has observed a new system of stress to tourism sectors, whereby, many scholars have performed a lot of research to understand and analyse the impact of COVID-19 that helps to promote recovery and resiliency [1], however, in the case of travel and tourism-related service in India, especially for Kerala, there is a gap in the literature on understanding and measuring the local economic impact of COVID-19 on urban tourism-related services by categories followed by their subclasses. Hence, on the cross-sectional service provider survey questionnaire and related survey plan, the empirical findings revealed that the stakeholders (employees and employers) of such tourism-related service providers in Kochi City have perceived a huge negative impact on the local economy that causes a sharp drop in the socio-economic status of the region. Therefore, the result has concluded that the high impact of the pandemic in Kochi city has been observed in terms of the reduction of the local economy (Q1). The impact in terms of job losses is another major concern within many categories and their related subclasses, whereas the impact in terms of reduction in working hours has been observed moderately; however, it was extreme in the case of some subclasses. The results of a one-way ANOVA have shown that these arguments were confirmed as there was a significant difference in the perceptions of respondents from all categories towards the impact of a pandemic on travel and tourism-related services/sectors. However, this research has some limitations, which are predominantly related to the site survey. Due to pandemic lockdown, the city was under travel restrictions and social distancing. Another limitation was the

language barrier, because the stakeholders in the local community generally prefer to share their views in their local-speaking language. Therefore, the findings of this research were concluded accordingly.

Conclusively, for the remedies to such an impact on the local economy, the action to restore tourism-related services should be based on consideration of the types and extent of the impact on the local economy of the region. It is essential to prioritize support for different subclasses according to their nature of services and to improve their resilience against crises and economic shocks in the future. In terms of measures, it is therefore suggested that the policies related to tax cuts and reductions (tax waivers) for service-providing enterprises and supporting companies, modes of payment of wages with facilities like subsidies and liquidity, provisions for direct income, and promotion of skilled workers are the key factors to consider on priority to recover the tourism industry in Kerala. It is thus supported by Widianingsih et al. [56]. As suggested, the travel and tourism industry in Indonesia could benefit from a centralized database, and in support of the tourism-service-providing sectors, it could be enhanced through promoting socio-economic insurance to the service providers. Some theoretical implications have been suggested for the government and industry, where the government should ease the issue of more practical and documented travel policies (including medical insurance, healthcare at nominal charges, accommodation, and other related services) for travelers that can benefit both travelers as well as tourism-related service providers [55]. Further suggested online training courses for skill development, promotion of small-scale businesses with investment programs, and digital traction are another crucial sector to assure the survival of tourism-related services in Kochi Heritage City. It is supported by Seshadri et al. [57], as they highlighted the radical shift in the consumption of travel and tourism products and also their marketing strategies that enhance their tourism enterprises. It helps in building the digital technological advancement in building relationships between the supplier and the customers sustainably. In addition, studies mentioned that the pandemic has evolved a new context for travel and tourism research where it is believed to act as a "switch breaker" for the tourism industry; thus, it was suggested that technological advancements in hotel (food and beverage) serving techniques support social distancing [54]. Another study supported the findings that discussed the travel intentions of Indian tourists and suggested an alternative insurance policy for travelers to enhance their travel experiences confidentially. It also introduced online training and awareness initiatives to reduce their perceived severity intentions linked with any pandemic/crisis by taking adequate preventive measures [53]. Thereby, it could benefit service-providing sectors in the long term and be more sustainable.

Hence, in terms of future lines of research, these quantitative data and analysis could be useful in impact assessment that can be utilized in the examination of different stages of interventions by individual categories followed by their respective subclasses.

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References

1. Parvin, M.; Tavakolinia, J.; Mosammam, H.M.; Razavian, M. The economic impacts of COVID-19 on the city tourism-related services; the case of Tehran. *Int. J. Tour. Cities* **2022**, *8*, 461–477. [CrossRef]
2. Henseler, M.; Maisonnave, H.; Maskaeva, A. Economic impacts of COVID-19 on the tourism sector in Tanzania. *Ann. Tour. Res. Empir. Insights* **2022**, *3*, 100042. [CrossRef]
3. Plzáková, L.; Smeral, E. Impact of the COVID-19 crisis on European tourism. *Tour. Econ.* **2022**, *28*, 91–109. [CrossRef]
4. Faeni, D.P.; Puspitaningtyas Faeni, R.; Alden Riyadh, H.; Yuliansyah, Y. The COVID-19 pandemic impact on the global tourism industry SMEs: A human capital development perspective. *Rev. Int. Bus. Strategy* **2023**, *33*, 317–327. [CrossRef]
5. Fan, X.; Lu, J.; Qiu, M.; Xiao, X. Changes in travel behaviors and intentions during the COVID-19 pandemic and recovery period: A case study of China. *J. Outdoor Recreat. Tour.* **2023**, *41*, 100522. [CrossRef]
6. Philipp, J. World Travel & Tourism Council (WTTC). In *Encyclopedia of Tourism Management and Marketing*; Edward Elgar Publishing: Cheltenham, UK, 2022; pp. 806–808.
7. Orîndaru, A.; Popescu, M.-F.; Alexoaei, A.P.; Căescu, Ș.-C.; Florescu, M.S.; Orzan, A.-O. Tourism in a post-COVID-19 era: Sustainable strategies for industry's recovery. *Sustainability* **2021**, *13*, 6781. [CrossRef]
8. World Tourism Organization. *International Tourism Highlights, 2020 Edition, UNWTO, Madrid*; World Tourism Organization: Madrid, Spain, 2021. [CrossRef]
9. UNWTO. *Tourism United, Resilient and Determined*; World Tourism Organization: Madrid, Spain, 2021.
10. UTWTO. World Tourism Barometer. Available online: https://www.sciencegate.app/source/313472 (accessed on 24 April 2020).
11. Jennings, G. *Tourism Research*; Illustrated edition; Wiley: Brisbane, QLD, Australia, 2001; Volume 1.
12. Shaw, G.; Williams, A.M. *Tourism and Tourism Spaces*; Sage: New York, NY, USA, 2004.
13. Yılmaz, A.; Gunay, S. Urban Tourism and Its Contribution to Economic and Image Regeneration. In Proceedings of the 1st International International Interdisciplinary Social Inquiry Conference, Bursa, Turkey, 17–21 June 2012; p. 16.
14. Ellikkal, A.; Rajamohan, S. Effect of COVID-19 Lockdown on Kerala's Job Market. *AIJR Prepr.* **2020**, *209*, 1–8.
15. Dileep, M.; Ajoon, J.; Nair, B.B. COVID-19 and tourism stakeholders: Experience, behaviour and transformation. *J. Organ. Ethnogr.* **2022**, *11*, 275–293. [CrossRef]
16. Cox, K.R.; Mair, A. Locality and community in the politics of local economic development. *Ann. Assoc. Am. Geogr.* **1988**, *78*, 307–325. [CrossRef]
17. Anell, L. Efficiency. In *Can the Welfare State Compete?: A Comparative Study of Five Advanced Capitalist Countries*; Springer: Berlin/Heidelberg, Germany, 1991; p. 311.
18. Li, X.; Petrick, J.F. Tourism marketing in an era of paradigm shift. *J. Travel Res.* **2008**, *46*, 235–244. [CrossRef]
19. Mohajeri, B. Paradigm Shift from Current Manufacturing to Social Manufacturing. Master's Thesis, Aalto University, Espoo, Finland, 2015.
20. World Travel & Tourism Council (WTTC). *WTTC Now Estimates over 100 Million Jobs Losses in the Travel & Tourism Sector and Alerts G20 Countries to the Scale of the Crisis*; WTTC: London, UK, 2020.
21. ILO. *COVID-19 and Employment in the Tourism Sector: Impact and Response in Asia and the Pacific*; ILO: Geneva, Switzerland, 2020.
22. Huynh, D.V.; Truong, T.T.K.; Duong, L.H.; Nguyen, N.T.; Dao, G.V.H.; Dao, C.N. The COVID-19 pandemic and its impacts on tourism business in a developing city: Insight from Vietnam. *Economies* **2021**, *9*, 172. [CrossRef]
23. Peugeot, C.; Dany, G.; Caroline, P.; Benjamin, S.; Valeria, H.; Serge, J.; Yves, T. Impact of the COVID19 crisis on changes in business travel and the associated carbon footprint. Case study of a French scientific research institute. In Proceedings of the Copernicus Meetings, Brno, Czechia, 12–14 September 2023.
24. Rajan, I.S.; Batra, P.; Jayanth, R.S.S.; Sivadasan, T.M. Understanding the multifaceted impact of COVID-19 on migrants in Kerala, India. *Dev. Policy Rev.* **2023**, *41*, e12636. [CrossRef] [PubMed]
25. Varghese, B.; Chennattuserry, J.C.; Kureethara, J.V. Sinking houseboats and swaying home stays: Community resilience and local impacts of COVID-19 in managing tourism crisis in Kerala. *Int. J. Tour. Cities* **2022**, *8*, 805–819. [CrossRef]
26. Gössling, S.; Scott, D.; Hall, C.M. Pandemics, tourism and global change: A rapid assessment of COVID-19. *J. Sustain. Tour.* **2020**, *29*, 1–20. [CrossRef]
27. Zhang, G.; Xing, L. Research on tourism economic effect under the threshold of new-type urbanization in coastal cities of China: From the perspective of development economics. *Ocean Coast. Manag.* **2023**, *239*, 106587. [CrossRef]
28. Nepal, S.K. Adventure travel and tourism after COVID-19–business as usual or opportunity to reset? *Tour. Geogr.* **2020**, *22*, 646–650. [CrossRef]
29. Sumanapala, D.; Wolf, I.D. The changing face of wildlife tourism during the COVID-19 pandemic: An opportunity to strive towards sustainability? *Curr. Issues Tour.* **2022**, *25*, 357–362. [CrossRef]
30. Mensah, E.A.; Boakye, K.A. Conceptualizing post-COVID 19 tourism recovery: A three-step framework. *Tour. Plan. Dev.* **2023**, *20*, 37–61. [CrossRef]
31. Das, S.; Nayak, J.; Naik, B. An impact study on COVID-19 and tourism sustainability: Intelligent solutions, issues and future challenges. *World Rev. Sci. Technol. Sustain. Dev.* **2023**, *19*, 92–119. [CrossRef]
32. Bilińska, K.; Pabian, B.; Pabian, A.; Reformat, B. Development Trends and Potential in the Field of Virtual Tourism after the COVID-19 Pandemic: Generation Z Example. *Sustainability* **2023**, *15*, 1889. [CrossRef]
33. Bhatta, K.; Gautam, P.; Tanaka, T. Travel motivation during COVID-19: A case from Nepal. *Sustainability* **2022**, *14*, 7165. [CrossRef]

34. Alonso, A.D.; Kok, S.K.; Bressan, A.; O'Shea, M.; Sakellarios, N.; Koresis, A.; Solis, M.A.B.; Santoni, L.J. COVID-19, aftermath, impacts, and hospitality firms: An international perspective. *Int. J. Hosp. Manag.* **2020**, *91*, 102654. [CrossRef] [PubMed]
35. Tourism Statistics of Kerala. *Kerala Tourism. Statistics 2018*; Research and Statistics Division, Department of Tourism, Government of Kerala, Ed.; Research and Statistics Division, Department of Tourism, Government of Kerala: Thiruvananthapuram, India, 2018; pp. 12–54.
36. Chedambath, R. Cochi-the City of Heritage. In *The City of Heritage*; Centre of Heritage, Environment and Development (C-hed): Cochin, India, 2013; Volume 1, p. 13.
37. Department of Town and Country Planning, G.o.K. , *India. Integrated Distric Development Plan, Local Development Plan-Kochi*; G.o.K. Department of Town and Country Planning: Thiruvananthapuram, Kerala, India, 2018.
38. CityReport-Kochi. *Kerala Sustainable Urban Development Project-Kochi City*; Local Self Government Department, Government of kerala: Ernakulam, Kerala, 2016; Volume 2.
39. Menon, S. At the Margins of Postcoloniality: Kochi as an Imagined City. *Media Cult. Stud.* **2016**, *1*, 9.
40. Arackal, M.; Kurisinkal, F. *Exploring Cochin*; Arackal, M., Ed.; Vasco Da Gama Research Institute of Cochin: Kochi, India, 2008; Volume 1.
41. Josna, R.P.; Kasthurba, A.K. Symbiosis of Conservation and Development: Historic City of Kochi, Kerala, India. In Proceedings of the International Conference on Transport, Civil, Architecture and Environment Engineering (ICTCAEE'2012), Dubai, United Arab Emirates, 26–27 December 2012.
42. D'Souza, R.E. The Indian Biennale EffectThe Kochi-Muziris Biennale 2012. *Cult. Politics* **2013**, *9*, 296–312.
43. Rahman, M.K.; Gazi, M.A.I.; Bhuiyan, M.A.; Rahaman, M.A. Effect of COVID-19 pandemic on tourist travel risk and management perceptions. *PLoS ONE* **2021**, *16*, e0256486. [CrossRef] [PubMed]
44. Kumara, H. Integrating Plan for Backwaters Transportation with Tourism Development: A Case Study of Kochi City Region. *Int. J. Urban Manag. Energy Sustain.* **2019**, *2*, 1–8.
45. Lawrence, W. *Social Research Methods*, 7th ed.; Pearson Education: Harlow, UK, 2018.
46. Chado, J. *Public Participation Efficiency in Planning for Urban Development in Bida, Nigeria*; Universiti Teknologi Malaysia: Johor Bahru, Malaysia, 2017.
47. Bartlett, J.A.; Kotrlik, J.W.; Higgins, C.C. Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Inf. Technol. Learn. Perform. J.* **2001**, *19*, 43.
48. Krejcie, R.V.; Morgan, D.W. Determining sample size for research activities. *Educ. Psychol. Meas.* **1970**, *30*, 607–610. [CrossRef]
49. Cochran, W.G. *Sampling Techniques*, 3rd ed.; John Wiley & Sons: New York, NY, USA, 1977.
50. Pallant, J. *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS*, 6th ed.; McGraw Hill Education: New York, NY, USA, 2016.
51. Creswell, J.W. *Qualitative, Quantitative, and Mixed Methods Approaches*; Sage Publication Inc.: New York, NY, USA, 2014.
52. Kakarlapudi, K.K.; Shagishna, K. COVID-19 and unemployment: How does Kerala compare with other States? *Kerala Econ.* **2023**, *3*, 44–53.
53. Gupta, V.; Cahyanto, I.; Sajnani, M.; Shah, C. Changing dynamics and travel evading: A case of Indian tourists amidst the COVID 19 pandemic. *J. Tour. Futur.* **2023**, *9*, 84–100. [CrossRef]
54. Huang, S.; Wang, X. COVID-19 two years on: A review of COVID-19-related empirical research in major tourism and hospitality journals. *Int. J. Contemp. Hosp. Manag.* **2023**, *35*, 743–764. [CrossRef]
55. Arshad, M.O.; Khan, S.; Haleem, A.; Mansoor, H.; Arshad, M.O.; Arshad, M.E. Understanding the impact of COVID-19 on Indian tourism sector through time series modelling. *J. Tour. Futur.* **2023**, *9*, 101–115. [CrossRef]
56. Widianingsih, I.; Abdillah, A.; Herawati, E.; Dewi, A.U.; Miftah, A.Z.; Adikancana, Q.M.; Pratama, M.N.; Sasmono, S. Sport Tourism, Regional Development, and Urban Resilience: A Focus on Regional Economic Development in Lake Toba District, North Sumatra, Indonesia. *Sustainability* **2023**, *15*, 5960. [CrossRef]
57. Seshadri, U.; Kumar, P.; Vij, A.; Ndlovu, T. Marketing strategies for the tourism industry in the United Arab Emirates after the COVID-19 era. *Worldw. Hosp. Tour.* **2023**, *15*, 169–177. [CrossRef]