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COVID-19, Tourism, and Nepalese Leisure Travelers' Willingness to Travel

Rajiv Dahal
Lecturer, Little Angels' College of Management, Nepal
rajiv.dahal@gmail.com

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Abstract

The paper aims to explore and understand COVID-19 and its effect on tourism in Nepal. More specifically, the study intends to find out Nepalese leisure travelers' past traveling behavior and their willingness to travel once the government of Nepal relaxes the COVID-19 related lockdown and measures. The study used exploratory research design and used a survey method to find out respondents' opinions on aspects of COVID-19 and tourism. The use of convenience sampling for collecting responses yielded 316 responses through email and social media platforms that lasted for three weeks in June - July 2020. The research revealed that most of the respondents are less affected by COVID-19 and are willing to take a holiday/vacation once there is relaxation of the COVID-19 measures. The majority of the respondents believed tourism as a significant part of the Nepalese economy, and expected tourism in Nepal would recover from the COVID situation.

Introduction

Nepal, a landlocked country, between the world's two giants – China and India, attracted a little over 1 million inbound travelers in 2019. There has been a constant surge of Nepalese traveling within the country and outside. One such estimate is - over 5 million visitors traveling within

Corresponding Editor
Ramesh Raj Kunwar
kunwar.dr@gmail.com

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Nepal for sightseeing purposes (Prasai, 2019). However, there is a lack of data on the exact number of Nepalese visitors traveling for touristic purposes. The year 2020 was marked as the takeoff platform to build Nepal's future as a viable tourism destination. The event was marked by the Government of Nepal (at all levels) with the aim of 2 million international visitors. However, the effort lacked serious preparation to position Nepal as one of the competitive tourism destinations in South Asia, if not the world.

With regards to Nepal's tourism strength, Nepal is considered one of the most sought after destinations but lacks a competitive edge over many established tourism destinations. Nepal, with a score of 3.3, ranked 102 out of 140 countries in the Global Travel and Tourism Competitiveness in the year 2018 (see Calderwood & Soshkin, 2019). Similarly, in South Asia, it ranked 3rd out of 5 countries. Nepal held a competitive positioning in terms of - 'price competitiveness,' 'safety and security,' 'prioritization for travel and tourism,' and 'human resource and labor market' in the South Asia Region. However, Nepal strongly lacks and needs drastic improvement to compete in South Asia as well as the global market in the area of- 'air transportation infrastructure,' 'tourist service and infrastructure,' and 'cultural, residential and business travel.' The report clearly shows that Nepal has a long way ahead to compete globally in the travel and tourism market. Additionally, Nepal has been witnessing the crisis of varied nature, from disasters to political unrest, and COVID-19. The latest epidemic has paused Nepal's aspiration for prosperity through tourism growth and development.

The historical development of tourism in Nepal has shown a continuous impact of crises on tourism. Politically there has been a decade-on change in the political setup of the country, which has had tremendous economic and cultural effects. Similarly, calamities like - earthquakes, avalanches, and flooding have been impacting tourism growth and development in Nepal. International events such as - September 11 attack on US soil, disease outbreak (such as Chikungunya, Dengue, Influenza, Ebola virus, SARS, Avian flu, etc.), Tsunami in Asia, and the Pacific, and presently the COVID-19 pandemic. Nepal had witnessed an outbreak of disease and disaster in the past. Still, the COVID-19 is one of its kind as this has impacted mobility of goods and services, stressed people economically/financially, and caused significant mental and physical challenges, prompting global closure and shutdowns.

There have been some researches on the impact of disease and disaster on travel and tourism in Nepal, primarily based on secondary sources. There has been no such research-oriented output on COVID-19 and tourism, and willing to travel post-pandemic. In this sense, this research is of greater importance to policy planners, government officials, tourism academicians, researchers, industry associations, etc. in understanding tourism through the lens of Nepalese leisure travelers' mindset, their

travel behavior, and their future travel plans. This research uses exploratory design whereby the author has tried to explore the COVID-19 situation and its impact on the leisure travel market in Nepal.

Tourism in Nepal has gained lots of attention domestically, too, with many Nepalese traveling within the country for leisure, recreation, and relaxation. There has been a significant surge in domestic tourists lately. In an interview to a newspaper, ex-CEO of Nepal Tourism Board, Deepak R. Joshi, approximately 5 million Nepalese traveled domestically for sightseeing purposes (see Prasai, 2019). With the COVID-19, tourism in Nepal is at a crossroads. Like many tourism destinations around the world, Nepal is waiting for the new normal to be soon to build back tourism better in the country.

This study aims to understand and explore the COVID-19 situation and its impact on tourism. The scope of the study is to examine and understand the past travel behavior of Nepalese leisure travelers and their willingness to travel once the government of Nepal relaxes travel and mobility-related restrictions. The research does not take into account other types of travelers, such as - business, religion, etc.

Literature review

Tourism in Nepal

Owing to its diverse natural and cultural resources, Nepal has carved a name for itself among the top tourist destinations of the world. Endowed with eight of the world's highest peaks, an exotic range of flora and fauna and rich mystical heritage and culture, the prospects for leveraging tourism as a critical driver for the nation's economic development are limitless.

Understanding the early days of tourism in Nepal, it is essential to discuss the context of the Great Adventure to the mountains and the mapping activity. In those days, visitors' pursuit usually involved exploring the untouched and unhindered mountain areas. Most of the land was unexplored, unmapped, and uncontaminated then. Such gave rise to increased interest among explorers and adventure seekers towards Nepal and its terrain. According to Gurung (1991), the first climbing activities in Nepal were the opening up of the border of Nepal to outsiders. Nepal opened its border to foreigners in 1950 with the end of the century-old dictatorship Rana regime and the subsequent establishment of democracy in the country.

It was a historic first ascent of Mt. Annapurna I by Maurice Herzog in 1952 that helped in the initiation and popularization of mountain-based tourism in Nepal. Another milestone was the climbing of the world's highest peak of Mount Sagarmatha (Everest) by Edmund Hillary and Tenzing Norgay Sherpa in 1953. These extraordinary human feats placed Nepal in the world's tourism map, but even in the

next ten years, the number of visitors to Nepal was limited. In the latter days, mainly after the establishment of the Tribhuvan International Airport, other types of visitors followed-suit.

With over 6000 in the first ten years, the number of travelers visiting Nepal increased nine-fold in the ten-year period that is 1962 to 1972 (Indian visitors not accounted for) (see MOCTCA, 2009). With few exceptions, there has been a steady growth of tourism over the years. There was a decline in visitor numbers between 2000 and 2006, mainly because of the unrest in the rural areas of Nepal by the Communist Party of Nepal (Maoist) CPM. However, with CPM joining the mainstream politics and formation of the later government, tourism in Nepal has seen the better part. The much-awaited peace process has indeed increased people's aspirations and hopes for continued political and economic stability, thereby enabling better conditions for tourism and other commercial activities. There was a decline in tourist visitation to the country between 2000 and 2006, mainly due to the people's war led by the Communist Party of Nepal (Maoist) (CPM) in the rural areas of Nepal. With the CPM clinching the majority of seats in the Constitution Assembly Polls last year (2008) and subsequently forming and leading the present coalition government, the country has shown a positive sign towards national reconciliation and the peace process. The much waited-for peace process has not only given hope to the people of Nepal but has equally enthused travelers to visit the country. It has been a steady growth of tourism in Nepal in the last 60 years. In the previous decade, only the tourist arrivals increased from 385297 in the year 2004 to 940218 in 2017 (MOCTCA, 2020). Political stability for the last few years has resulted in increased tourism numbers in Nepal. In 2019 alone, Nepal witnessed a record of 11,197,191 visitors that created more than 1034000 jobs and brought USD 833.3 million (NPR 93.9 billion) to the economy (see WTTC, 2020; MOCTCA, 2020). This number has been 2.01 % greater in comparison to the previous year 2018. Out of the total number of tourists, 83% had arrived by air and 17% by land. The top five in terms of tourist arrivals are - India, China, USA, United Kingdom, and Sri Lanka (see MOCTCA, 2020). The recent National Tourism Statistics 2019 shows that cross foreign exchange earnings from tourism rose from USD 158.7 million in 2000/01 to around USD 670.6 million in 2018/19.

The travel and tourism sector is a primary source of revenue, foreign exchange, and employment for the country, contributing 7.9% to the total GDP and 6.6% to the overall jobs (translating into ~1,027,000 jobs) as at 2018 (WTTC, 2019). Nepal's travel and tourism sector brought NPR 195 billion into the economy and supported 497,500 jobs that are 3.2% of total employment in 2019 (WTTC, 2020).

Before the COVID-19 situation, Nepal was gearing up for 2 million visitors in 2020. A report by PATANepal (2018), predicted that Nepal would receive 5 million tourist arrivals by 2030. The report shows a promising future for Nepal's tourism.

With an assumption of 13.18% growth rate per year, it would help Nepal achieve the target of 5 million visitors by 2030 (PATANepal, 2018). Tourism in Nepal was witnessing a stunning rebound from the earthquake of 2015, some of such could be attributed to: (i) stable political condition in Nepal; (ii) macroeconomic situation of the country; (iii) increased air services, connectivity and subsequent reduction in airfares; (iv) initiation and completion of 3 major international/regional airports; (v) expanded road networks in the country; (vi) development and initiation of railways; (vii) progress of some critical Nation's Pride Projects development, including – Fast-track linking Kathmandu to Terai; Mid-hill Highway, East-West Railway, North-south Corridor, etc.; (viii) increased tourist traffic post-earthquake; (ix) Rise of Asian economies (increased GDP, disposable earnings, and willingness to travel), mainly – India, China and the ASEAN countries; (x) increased tourism growth in Asia and the Pacific (mainly India, China and the ASEAN market); and (xi) restructuring of state policy, and other associated reforms in line with the federal structure of the country (PATANepal, 2018).

Numerous international travel websites have listed Nepal among one of the leading tourist destinations. According to Lonely Planet's Annual "Best in Travel List," Nepal is the Best Value Destination to travel in the year 2017 (Kathmandupost.com, 2016). Lonely Planet, a significant global travel guide book publisher, ranked Nepal 5th in the Top 10 countries 'that you cannot afford to miss' list. Trip Advisor, an online travel company that operates a global platform with an average of 500 million visitors monthly, has listed Kathmandu city in the Top 25 travel destinations in the year 2019 (Prasai, 2019). It has set a target of a 25% contribution from the tourism sector within five years. Currently, tourism contributes 2.2% to its GDP, and it earns around US$ 703 million from one million tourists annually. In the same line, the Forbes Magazine named Nepal as 'top destinations for travelers to visit in 2020 and beyond' (Kathmandupost.com, 2019). The paper states that Nepal has been defined as a once-in-a-lifetime experience to book in 2020 under the theme – '2020 Travel Goals: Ten Bucket List Trips for the Next Decade'. There has been a significant change in Nepal's tourism post-earthquake of 2015. The positive change has increased tourists and revenues from tourism. The National Tourism Strategy 2016–2025, envisages a fivefold increase in annual arrivals by 2025 (see MOCTCA, 2016). To achieve the objective, the Government of Nepal has stepped up efforts to promote travel and tourism through arrays of activities. Few such are – amending policies to make it market-friendly, enhancing targeted marketing campaigns, and drawing investment programs and activities. One such effort was the Visit Nepal 2020 Initiative to attract two million tourists and generate one million job opportunities in the sector by 2020. However, the COVID-19 pandemic affected such plans, and the government has shelved the initiative as of now.

Disease, mobility, and tourism

Several factors will shape human and their activities (including tourism) in the 21st century. As per Jamal & Budke (2020), climate change and health emergencies will be the two most important drivers of change to tourism industries. With climate change, countries like - the US, India, China, Brazil, and others, are yet to accept it as a significant one. However, disease and outbreaks are the clearest and received one. There have been several cases of illness and epidemic in the past that had significantly impacted travel, mobility, and tourism globally. Severe Acute Respiratory Syndrome (SARS), Chikungunya, Dengue, Influenza (both seasonal and pandemic), Animal and vector movement diseases, Ebola virus, etc. have impacted humans and their associated activities (see Baker, 2015). The recent being the COVID-19.

On the other hand, travelers are equally the cause of the spread of such diseases globally. Travelers have been reported to be both carriers of such conditions and also victims. That is what makes disease, tourism, and mobility an essential consideration for research during this troubling time and even in the future. There have been more significant debates over disease and its impact on travel mobility and vice versa. A report by Baker (2015) indicates that travel patterns influence disease outbreaks and help see the growth of such diseases (Hollingsworth et al., 2007). Travel for tourism purposes entails more meaningful mobility, such as - railways, airways, land transportation. The use of such systems and services by travelers equally contributes mainly to the spread of such diseases. Several studies point out the emergence, proliferation, and containment of such conditions at places of tourist contact (see Yang & Chen, 2009; Hufnagel et al., 2004; Hollingsworth et al., 2007). One such case is the spread of Hong Kong Influenza. As per Rvachev & Longini (1985), the HongKong influenza strain of 1968 and 69 quickly spread throughout the world, mainly through the air network and connectivity (as cited in Baker, 2015). A similar study by Tatem et al. (2006) presents that transport networks such as - air, sea and land, contribute to the reach and spread of diseases, primarily carried through passengers and goods. There are several historical examples of viruses and outbreaks, such as - global influenza pandemics, Anopheles Gambiae invasion, malaria, SARS, HIV/AIDS, Cholera, etc. (Tatem et al., 2006)

There were a record 1.5 billion international tourist arrivals (overnight visitors) worldwide in the year 2019 (UNWTO, 2020a). There has been an increasing trend of people visiting the world for the last couple of decades. However, the increased risk of COVID-19 due to mishandling has led to the shutdown of the economy world over. Additionally, this has impacted the mobility of people, goods, and services, including the tourism system. Airports, seaports, railways, hotels, restaurants, and all those services points of tourist contact have been closed down since January 2020. Studies by Monterrubio (2010), Pavli et al. (2014), Gostin & Berkman (2007), Tuite et al. (2020), Lean & Smyth (2009), Kuo, Chang, et al. (2009), Chinazzi et al. (2020), Baker

(2015), Farzanegan et al. (2020), Fang et al. (2020), Hollingsworth et al. (2007), Haque & Haque (2018), WTTC (2018), Kuo, Chen, et al. (2008), Ruiz Estrada et al. (2019), Page et al. (2012), Korstanje (2011) show visitors to/from disease-affected areas are a primary source of spread in outbreaks world over, including COVID-19.

The world today is very dynamic; in a sense, there is a dynamic interaction between the visitor, community, and the outbreaks. Tourists play a significant role in transmitting diseases, flu, and viruses when they come in contact with the local population (Baker, 2015). These visitors become carriers, leading such conditions to their country of origin or places they stop through their journey. The situation becomes much more fatal when such viruses could get transmitted through blood and body fluid exposure (Baker, 2015). It is a norm that tourism destinations provide facilities and services to cater to the interest of travelers. In this sense, travelers indulge in sexual activities, perform extreme adventurous activities (such as hiking, trekking, mountaineering, jungle safari, paragliding), and other injury-prone activities that increase the risk of getting infected. Conversely, there are higher chances of tourists affecting people and places they associate within their course of journey or holidays (Zuckerman & Steffen, 2000).

Correia et al. (2001), in their study based in Canada, reported that tourists and the host interaction had a higher risk of getting exposed to blood and body fluids through intimacy with a new partner. Additionally, sharing instruments such as shaving kits, receiving medical equipment and being injected, getting a tattoo, body piercing, and use of acupuncture and other traditional medicinal practices and equally specific injuries. Generally, young travelers pose a more significant risk of such bloodborne pathogens. Young travelers are more free-minded, independent, and reckless at many times, increasing the chances of such encounters and activities. There are higher chances of sexually transmitted infections such as HIV/AIDS, Hepatitis B acquired during sexual encounters at places of visitation and carrying such through transit or destination, and ultimately being brought to their home (Baker, 2015). Similar is the case of COVID-19. With many unchecked and uncontrolled international flights to/from Wuhan province of China in the early days of the COVID19 outbreak, led to the contract and broader spread of such worldwide (Lai et al., 2020). Such has led to the present-day crisis throughout the world.

Past studies have suggested that pandemics such as COVID-19 and others have brought a more significant financial crisis to a country, region, and the whole world. Such a crisis eventually affects the viability of tourism in the areas of crisis and takes lots of time and effort in reviving tourism at those destinations. One such example is the study by Lean & Smyth (2009), where they investigate the effect of the financial crisis, avian flu, and terrorist threats in the context of Malaysia. The study shows an impact of diseases and deaths in the various regions of Malaysia: outbreak of dengue

fever in mid-1997 in the Penang region, Coxsackie B virus in Sarawak region, and the Cholera epidemic in the Sabah region. In events like these, the source markets and the destinations alike issues inevitably travel restrictions to contain the widespread effects of such diseases. The same was evident when the Chinese government stopped receiving visas and other necessary travel requirements to Malaysia, Singapore, and Thailand on the onset of the SARS outbreak (see Lean & Smyth, 2009). An estimate by UNWTO, tourist arrivals would decline by 60% to 80 % in 2020, leading to a loss of US$ 910 billion to US$1.2 trillion in export revenues from tourism, and risk of 100 to 120 million direct tourism jobs (UNWTO, 2020b). There will be enormous economic peril to Nepal (heavily dependent on tourism) if COVID-19 pandemic does not slow down or if no cure is possible.

COVID-19: an overview

Coronavirus seems to have a very long history. It's been more than 50 years since the term 'coronavirus' got coined (see Ulak, 2020). According to Weiss & Navas-Martin (2005), it was in the year 1968; the word coronavirus got invented. COVID 19 started from Wuhan City of Hubei Province of China in December 2019 and spread globally at an alarming rate (Ruiz Estrada et al., 2019). According to the World Health Organisation (WHO), "Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus" (WHO, 2020a). People infected with the COVID-19 virus will experience mild to moderate respiratory illness and medical sickness without going through special treatment. As per WHO (2020a), people with cardiovascular diseases, diabetes, chronic respiratory diseases, and cancer are more likely to develop serious illnesses. Older people with such problems and symptoms are greatly affected by COVID-19. However, there are unusual cases, too, where any age group might be vulnerable to COVID-19 if the immune system is weak, and they suffer from medical problems. COVID-19 virus spreads primarily through saliva droplets or gets discharged from the nose when an infected person coughs/sneezes (WHO, 2020a; Jayaweera et al., 2020). That is why WHO and other health organizations globally have been recommending proper respiratory etiquettes and practices (such as coughing into a flexed elbow and using a mask when in contact with other humans) (see WHO, 2020e; UN Nepal, 2020; CDC, 2020).

The COVID-19 is more severe than preceding diseases and outbreaks. In two months, the COVID-19 cases exceeded that of SARS. On January 31st, 2020, the number of confirmed cases of COVID-19 reached 11791 in China (that is double the number of SARS infections), and in the immediate next three days, the number of confirmed cases reached 20000. By the 10th of February, the number reached 42,638 in China alone (see Ruiz Estrada et al., 2019). The WHO declared COVID-19 health emergency on 30 January 2020, and governments worldwide started taking measures to minimize the spread of COVID-19. The outbreak was traced to the Seafood

Market in Wuhan City in China. The people who visited the market developed early symptoms like Pneumonia. Since then, as of 20th August 2020, 4:17 p.m. Nepal Standard Time, there have been 22,60,5041 confirmed cases of COVID-19, including 7,91,568 deaths (WHO, 2020b).

According to the Government of Nepal's Ministry of Health and Population, from 23rd January 2020 until 20th August 2020, Nepal has seen 29,645 confirmed cases of COVID 19 with 126 deaths (see MOHP, 2020). Many countries, including Nepal, applied strategies such as lockdown to minimize the spread of COVID-19. The effectiveness of lockdown in containing COVID-19 is still unclear. However, many countries have successfully proven this as a strategy to reduce the effect of the outbreak. The earliest one was China, followed by Taiwan, Hong Kong, Philippines, and others. According to Chinazzi et al. (2020), the COVID-19 did not gain much public attention globally until the imposition of the travel quarantine of Wuhan. Since then, countries like the United States, Brazil, France, Italy, India have faced immense effect due to the spread of the disease. It is unfortunate that until a medical cure is possible, humans will have to live with the virus.

There has been no specific medicine or vaccine for COVID-19 until now. There have been several reports that show medical and pharmaceutical companies working tirelessly to come up with vaccines to boost the immune system. Targeting and strengthening immune system seems to the be the only primary and the most effective way to counter COVID-19 in a patient (see WHO, 2020d; Catanzaro et al., 2020; Florindo et al., 2020; Yazdanpanah, Hamblin & Rezaei, 2020; Felsenstein et al., 2020). The Oxford University's Jenner Institute and the Oxford Vaccine Group have been pioneering the efforts towards the discovery of a safe, effective, and accessible vaccine against coronavirus (University of Oxford, 2020). They have conducted trials on ten volunteers, and the initial response and data show that they are very confident the vaccine will work and have them plan to manufacture vaccines at a larger scale. Besides the Oxford University, MODERNA (USA), SINOVAC (China), Wuhan Institute Of Biological Products (China), Beijing Institute Of Biological Products (China), are conducting Phase-3 clinical trials of their vaccines (see Gavi, 2020). Presently, there are over 170 teams of researchers racing to develop a safe and effective Vaccine (Kommenda & Hulley-Jones, 2020). Russia has become the first country to license a COVID vaccine, named -Sputnik V, which has received mixed reactions (Aljazeera, 2020). Many countries like Vietnam, Brazil, Germany have shown interest in purchasing and producing the Russian vaccine together (see Nguyen, 2020; Fonseca & Boadle, 2020; Tass, 2020). Even the WHO is in talks with the Russian government mainly for information about the Sputnik V vaccine trials. Meanwhile, Russia is further testing the vaccine to around 40,000 persons in the coming week (Beaumont & Agencies, 2020).

Going by the effort and progress of vaccine trial campaigns on humans, there might be a vaccine soon. However, the WHO is very skeptical of the chances of new vaccines coming out this year, and might take as early as 2021 to come up with a safe and successful vaccine that can help the human race overcome COVID-19 (The National, 2020). From the rate of competition amongst states and pharmaceutical companies, it could have a double effect: first, there could be misfiring out of rush with the human trials, and secondly, this will significantly fuel countries to monopolize the supply of such even if the tests get successful. However, there remains the socio, economic, political debates over the sanctioning, accessibility, and affordability of such to ordinary people throughout the world.

COVID-19 and the socio-economic impact

There are several impacts associated with diseases such as COVID-19 and socio-economic impacts. Studies have shown significant economic, social, cultural, and environmental effects of outbreaks. Brahmabhatt, in 2005 (cited in Kuo et al., 2009), points to the economic impacts of diseases arising mostly by the efforts of state and industry players. These actors play a significant role in avoiding the rapid spread of such diseases rather than the actual conditions and its consequence of sickness or death (see Kuo et al., 2009). Such economic impact arises from demand shocks in sub-sectors of the economy, such as - tourism mass transportations, hospitality, retail sales, etc. (Brahmabhatt, 2005 cited in Kuo et al., 2009).

Nepal was the first country in South Asia to have a reported case of COVID-19 (NDTV, 2020, as cited in Poudel & Subedi, 2020). The first such case in Nepal had mild symptoms, got admitted to the hospital and later discharged because preliminary tests showed no such effect of COVID 19 (see Bastola et al., 2020). The increasing number of people with COVID-19 prompted the Government of Nepal to enforce lockdown since 24th March 2020 (see Wikipedia, 2020). After nearly four months, the government has ended lockdown but with restrictions (Pradhan, 2020). All international and domestic flights are to resume starting August 17. The lockdown brought several difficulties to people, and the government's continuous request to adopt measures to counter COVID-19 has multi-dimensional effects.

A recent study by Poudel & Subedi (2020) states that with COVID-19 and the measures to counter them by locking down and maintaining social distancing has affected Nepalese in many ways. People have been affected physically, mentally, socially, and spiritually. The pandemic equally has brought tremendous economic impact. A recent study by REANDA (2020) states that industries and companies had already felt the effect of COVID-19. In the short run, namely – halt in production due to supply chain disruption and workforce dislocation, leading to the cost of production and ultimately increase in the price of products.

Similarly, in the mid-term, the project that industry will be affected by decreased demand. The long-term assessment projects reevaluation of strategies to minimize risks and have a competitive edge over competitors to procure raw materials to run the production efficiently. The report highlights a significant change in investors' mindset, mainly – (i) deferring investments; (ii) reevaluation of potential risks; (iii) rethinking over product manufacturing choices. Nepal is heavily dependent on neighboring countries (China and India); importing raw materials are likely to decline. Nepal lacks a competitive advantage over other countries in South Asia to procure raw materials, thus will make Nepal more dependent on other countries to meet the void created by such. There will be an increase in fuel imports, widening the gap between export-import even more, thus bringing undesired problems in the balance of payment condition. Similarly, there will be a significant decline in remittance in the immediate future. Remittance and Tourism were two main pillars of the national economy before COVID-19 situation, bringing much need for foreign currencies to counter trade deficit and pressure of import.

COVID-19 will impact the overall sector of the economy, and tourism will be the worst-hit sector (see REANDA, 2020). Nepal's main two source markets have been the greatest affected by the COVID-19 crises. India and China ranked Number 1 and 2 respective countries in 2019, with 254150 (21.2 % of total arrivals) and 169543 (14.2%) (MOCTCA, 2020). Combinedly, Nepal received 35.4 of total tourist arrivals from these markets. On the other hand these both countries are the most affected ones in the world. China is where the COVID-19 originated and is one of the worst affected areas. India, another source market, is on the world's top five most affected counties. It's doubtful that long-haul tourism will restart anytime soon. The COVID-19 situation has affected the tourism sector severely, resulting in the suspension of the Nepal Tourism Year 2020 campaign by the Government. Also, there is a loss of revenue and employment from tourism. REANDA (2020) points out that the close of the Everest expedition alone causes 20,000 trekking and mountaineering jobs, with induced effect on hotels, restaurants, leading to layoffs of staff. Even tourism and mobility restarts, it will take a long time to recover to the pre-COVID situation. In the present context, Nepal would naturally rely on these two large markets. However, the lackluster approach from the concerned authorities seems very unlikely to fuel leisure travelers' willingness to travel.

Travel behavior

Travel behavior is the execution of anticipation, planning, and decision making of a tourist. Van Vuuren & Slabbert (2012) explains 'travel behavior' as a concept whereby a tourist is subject to behave in specific ways, before and after traveling. Several personal and interpersonal factors affect such behavior. Additionally, the

interaction between individual and environmental factors results in the continuation of such action (Van Vuuren & Slabbert, 2012).

An approach to understanding travel behavior and demand is through the concept of 'human activity.' This concept elucidates that the activity decision process leads to travel. Similarly, activities and involvement plans influence travel decisions (Recker et al., 1986). The tourism demand comprises a willingness to travel for activities travelers who wish to participate. As per Builiung & Kanaroglou (2007), this tourism demand arises because of individuals and family need for involvement in activities. Understanding tourism demand and variations are essential for destination managers and industry players. Market segmentation based on lifestyle, activities, and sociodemographic variables serves as the key to understanding tourism demand. In this context, Chen et al. (2009) provide useful insight into vacation lifestyle and travel behaviors, with a focus on the Taiwanese market. They state that there have been fewer deliberations on lifestyle variables that serve as an essential basis for market segmentation. Chen et al. (2009), using cluster analysis in the paper, conclude with three groups of travelers: (i) family, (ii) social, and (iii) stylish. A considerable difference existed in the tip characteristics, frequency of travel, accommodation choices, and the average money spent on lodging, due to varied demography of the respondents.

Axhausen (2007) states that "travel behavior research studies the physical movement of persons outside their reference locations for any purpose" (p. 166). The time of movement is - a day spent out of reference location. At the same time, the reference location refers to the place of origin, where people return at the end of the day. Axhausen (2007) identifies such reference could be the person's home, the place they reside during their holiday or any temporary station. Furthermore, the framework of such a person's daily program outlines the duration a person spends out of their residence until the end of the trip. As per Axhausen (2007), few other essential components while indulging in an activity that needs consideration by a traveler are (i) purpose, (ii) timing, (iii) duration, (iv) location, (v) number of participants, (vi) cost, and (ii) plans and programs. These elements complete the scope of the 'activity' which Axhausen (2007) states a progression emerging out of interaction in a given spatial and social context while interacting with each other. That is why understanding travel behavior requires considerable research time and effort.

Predicting travel behavior is a complicated and challenging activity (Jeng & Fesenmaier, 2002). It requires rigorous research into individual characteristics and situations to predict such behavior, like destination and holiday choice (see March & Woodside, 2006; Laws, 1995; Holloway, 2004). Studies by MacCannell (1973), Plog (1974), Crompton (1977), Pearce & Caltabiano (1983), Pearce (1993), Hung & Petrick (2011), Huang & Xiao (2000), Cooper et al. (2008), Saayman & Saaactyman (2009)

helps to understand travel behavior in details. These studies present tourists' diverse motivations to travel, ranging from - relaxation to escape from day to day environment or to discover and recognize oneself. In a greater sense, tourist motivation helps in understanding travel behavior and willingness to travel. Xie & Ritchie (2019) states that "tourist motivation, travel constraints, and constraint negotiation (overcoming constraints) are important components of travel decision-making" (p. 111). These components affect each other and also travel behavior; that is why it is crucial to understand these components (Xie & Ritchie, 2019).

Travel motivation is an essential tool in assessing market needs, wants, and demands. Understanding such motivation influences tourist behavior and activities at a destination, thus helping tour operators with adequate data to reach potential travelers (Crompton, 1979; Mannell & Iso-Ahola, 1987; Cha et al., 1995 cited in Xie & Ritchie, 2019). Understanding of travel motivation and behavior helps destination managers, policy planners in estimating and managing tourism demand. Such factors equally assist tourists in the travel decision-making process (see Van Vuuren & Slabbert, 2011; Ng & Ho 2018; Chen et al., 2009).

Willingness to travel

Willingness to Travel (WTT) is a tool that helps in understanding people's travel choices and activities (see Hanemann, 1991; Poor & Smith, 2004; Abuamoud et al., 2014). As per Abuamoud et al. (2014), this method helps in estimating the impact of economic decisions and activities, like cultural heritage resources. WTT also helps in determining the number of potential visitors to a destination or a site (Navrud & Ready, 2002; Samdin, 2008). Several factors affect or might affect people willing to travel to a given destination.

There are several studies undertaken to understand peoples' willingness to travel to a destination. However, very few researches present an elaboration of the use of such a tool during the time of disease outbreak. One such study was undertaken by Aro et al. (2009) on Finnish tourists during the Avian Influenza outbreak in Asia. The research focussed on understanding the Finnish tourists' willingness to avenge travel-related health risks. From the study, it was evident that these travelers had immense belief in fate and god while on holiday and business trips. They were willing to take such risks by even neglecting the precautionary measures, such as avoiding handshaking. From the research, it was evident that holiday tourists were risk-takers compared to older ones, and also those on holidays took more risks compared to those on business. Despite the dangers of Avian Influenza, SARS, HIV, and other infectious diseases, holiday tourists were more of a risk-taker compared to business travelers. Young travelers opined that any risk should not outshine holiday plans at any cost. Holiday trips were prone to health risks compared to a business trip, considering

the independence and freedom of choices. Business travelers are confined to set-programs and are rational evaluators of risks in life (see Aro et al., 2009).

Smith (1985), while analyzing US Vacation Travel Patterns, has identified and used variables associated with willingness to travel, mainly – social and geographic. As per Smith, these variables are broad and have categories that overlap each other, though partially. The social variables comprise of – income, race, education, age, and % of the population living in urban regions. These are highly related to vacation patterns. Similarly, geographic variables constituted – population density, proximity (distance), availability of major tourist attractions, weather conditions, accessibility (extensive and efficient highways), the relation between origin and destination, percentage of vacation person-nights made in-state and opposed to out-of-state, and vacation quotient. This research has used the variables explained by Smith (1985), but with changes to suit the research subject.

Research methodology

Globally, there are significant studies on leisure travelers, tourist motivation, past traveling behavior, willingness to visit a destination, and disease and mobility. However, there is a lack of research on the context of outbreaks, leisure travelers, and their desire to travel. With regards to Nepalese leisure travelers, Baniya & Paudel's (2016) work can be considered substantive. Baniya & Paudel's (2016) work provides insight into the motivation of Nepalese travel markets, using push and pull factors. No other papers have focussed on the aspect of Nepalese travelers' motivation and behavior. In this sense, this paper seeks to bridge the gap in the area of Nepalese leisure travelers and their traveling behavior.

This paper aims to explore Nepalese leisure travelers' past traveling behavior and their willingness to travel post-COVID-19, once the government of Nepal releases the travel restrictions. To achieve these goals, the researcher uses exploratory research design and quantitative technique (survey). The use of questionnaires helps in avoiding biased opinions and in deriving a reasonable conclusion. The study was administered in the 4th week of June, the 1st and 2nd week of July 2020 (total for three weeks). A convenience sampling approach technique was used primarily because of the COVID-19 situation and the restriction on mobility. Naturally, the use of electronic media and the use of social media was the most appropriate tool to employ for the distribution of such a survey questionnaire. The questionnaire consists of - (i) the importance of tourism to Nepal; (ii) past travel behavior; (iii) COVID-19 and its impact on respondents; and (iv) willingness to travel once the government of Nepal relaxes travel and mobility restrictions.

The researcher approached people from diverse social, economic, and educational backgrounds. Nepalese nationals from the travel trade; hospitality, and catering

services; developing agencies (NGOs and INGOs); academia; protected area consultancy and professions; manufacturing and retail businesses; construction sector; banking and financial sectors; marketing and administrations; and university students were selected and approached for the study. There were two essential criteria set for selecting respondents: (i) Nepalese nationals residing in Nepal; (ii) one who traveled for at least one leisure pursuit in the last three years. Altogether 700 persons were contacted via email and through social media (Facebook Messenger and LinkedIn). Few who did not use Facebook messenger and LinkedIn were targeted over Facebook posts for five days (in the 1st and 2nd week of July). Out of the targeted sample, 325 responded with a filled questionnaire. Nine responses did not comply with two criteria (mentioned above), thus, discarded from the analysis. Out of 325 surveys, only 316 were considered usable for analysis.

The data collected was analyzed with the help of tools such as SPSS and MS-Excel. The data collected from the respondent were coded and tabulated into SPSS, worksheet, and analyzed using descriptive statistics. From the analysis, it was evident that most of the respondents (n=316) were between the ages of 18 and 30 (70.3%). Similarly, gender distribution showed that the majority of respondents were male (71.8%). Half of the respondents (50%) had Bachelor-degree and employed in different sectors. On marital status, the majority of the respondents were 'single' (65.2%).

Results and discussions

Past travel behavior

Past travel behavior provides an insight into the travel pattern and factors that enable such trips (see Hanson & Hanson, 1981; Handy, 1996; Van Vuuren & Slabbert, 2012; Axhausen, 2007; Jeng & Fesenmaier, 2002). The study of past travel behavior provides insight into travel purposes, travel choices, and their willingness to specific types of holiday and activities. Such information is essential from the perspective of destination managers, planners, service providers, and researchers. The following section presents a brief overview of their holiday/vacation and their interest.

Number of trips taken and days spent

Out of total respondents (n=316), it was evident that almost 61% of the respondents had "1 trip" every year for the last three years. Similarly, 28.5% stated they had taken "2-3 trips" in the past three years, followed by 8.2 % who took "1 trip" in the past three years. From the survey, it was evident that the majority of the respondents had been taking up leisure travel in the past three years. Regarding the number of days spent on tour holidays, 42.7% (n =316) of the respondents spent 3 to 5 days on holidays, followed by 14.2% who spent six days and more on their last holiday trip. Only 17.1% of the respondents spent less than three days on their recent holiday trip.

Amount spent on last holiday (in NPR)

From the research it was evident that out of total respondents (n = 316), more than 27.8% of respondents spent the amount (in Nepalese Rupees) NPR 10,001-20,000, followed by 27.2% who spent 40,001 and more, and 19% spent less than NPR 10,000. Similarly, 16.8% spent NPR 20,001- 30,000, and remaining 9.2 % spent NPR 30,001 - 40,000.

Travel - pattern, behavior, and purpose

Regarding respondents' vacation patterns, it was evident that 78.2% of the respondents (n=316) had taken their holidays within Nepal, and the remaining 21.8% traveled outside Nepal. Analysis of open-ended responses shows popular destinations as - Pokhara, Ghorepani, Poonhill, Langtang, Lumbini, and Mustang. It's exciting to find that the popular destination remained Pokhara and the Annapurna region because of a well-established tourism destination, provisioning of better facilities and services, provisioning of promotional and informational sources, air and road connectivity, etc. Similarly, 64.6% of the respondents (n=316) traveled with family. The majority of the respondents (69%) went for a holiday, leisure, and recreation purposes, followed by 18.4% for education and training, 7% to visit their friends and relatives, 1.6% for religions/pilgrimage, and 1.3% for health/medical care.

Regarding the organization of the trip, it was evident that 72.8% (n=316) traveled independently, arranging all components of the trip and services by themselves. Similarly, 24.7% of the respondents traveled on pre-packaged tours, purchased from travel/tour operators. Remaining 2.5% of respondents traveled through other mechanisms whereby organizations they worked or associated with had taken care of such arrangements. The responses show travel agents/tour operators will suffer more if they do not try to accommodate Nepalese travel behavior and choices.

Effects of COVID-19

There has been growing concern over the pandemic effect on society on several fronts. In this sense, respondents had four dimensions to respond, namely: (i) health-wise (involving physical and psychological); (ii) economically/ financially; (iii) socially; and (iv) mobility of goods and services. Additionally, three scales -'greatly,' 'slightly,' and 'not at all,' used to measure such an effect. About health, more than 45% of respondents were 'slightly affected' by COVID-19. Regarding economically/ financially, 52.5% of the respondents said that they were 'slightly affected,' followed by 33.9% stated that they were 'greatly affected' by COVID-19 pandemic. Similarly, 48.7% of the respondents were 'slightly affected' 'socially,' followed by 30.7% who were 'greatly affected.' With regards to 'mobility of goods and services,' it was found that 53.8% responded that they were 'slightly affected,' followed by 31.3 % who were 'greatly affected.' 14.9% were 'not at all affected' in terms of mobility of goods and services.

Tourism in Nepal and COVID-19

About the importance of tourism for Nepal more than 88.9% of the respondents believed that tourism to be 'very important' for Nepal, followed by 8.5% thought tourism as 'important.' 1.9 % of the respondents were 'neutral' to the question posed, and less than 1% responded that they do not believe tourism to be essential for Nepal.

Regarding the 'future of tourism in Nepal,' 39.6% of the respondents were found to be 'very optimistic,' followed by 31.6% who stated to be 'optimistic.' Similarly, 22.5% of the respondents were 'somewhat optimistic,' and less than 2% were 'not at all optimistic' regarding the future of tourism in Nepal.

While understanding respondents' perception of tourism recovery in Nepal from the present situation of COVID-19, it was clear that 63.6% believed tourism would recover, followed by 'maybe' with 31.3%. Only 5% think tourism will not recover in Nepal from the present situation of COVID-19.

Role of organizations involved in tourism

World over, the government and their bodies have been instrumental in leading their country to contain COVID-19 and stimulating economic sectors, including tourism. In this context, respondents were to present their views on the government and their bodies' role in tourism recovery and promotions in Nepal.

Regarding awareness of the Government's initiative of promoting tourism (both domestic and international) in Nepal, 65.8% of respondents were unaware of the government's action of promoting tourism to both local and international markets. Only 34.2% stated that they were aware of such. However, only a few could mention such. Upon analysis, it was evident that most of the respondents indicated government initiative and activities undertaken in the past before COVID-19 (such as - visit Nepal 2020) and not present policies and or incentives for reviving tourism in Nepal. Respondents were to rate the role of the Federal and provincial governments and the Nepal Tourism Board (NTB) (apex body related to marketing and promotion of tourism) in tourism recovery. Similarly, five aspects with regards to organizations' role, namely - i) adequacy, ii) appropriateness, iii) responsible, iv) influencing, and v) overall satisfaction was to rate on 5-point Likert scales.

Regarding 'adequacy' of the role of government and their bodies, it was evident that 34.2% of the respondents found the Federal government's role to be 'slightly adequate,' followed by 31.3% who stated 'not at all adequate.' Similarly, with regards to the Provincial government's role, 41.5% said 'not at all adequate,' followed by 28.8% stated to be 'slightly adequate.' Similarly, with regards to 'adequacy' of the role of Nepal Tourism Board (NTB), 29.7% of respondents stated to be 'slightly adequate,' followed by 6.6% who thought 'somewhat adequate,' and 21.5% 'not at all adequate.'

Regarding the 'appropriateness' of government and their bodies' role in these troubled times, 36.7% found the part, of the Federal government as 'slightly appropriate,' followed by the Provincial government's role as 'appropriate' (34.8%), and that of NTB as 'slightly appropriate' (30.1%). 24.1% of respondents opined the role of the Federal government as 'not at all appropriate.' Governments and their bodies' responsibility are enormous during a troubled time, such as COVID-19. Industry, travel professionals, and tourists alike are expecting the government and their bodies' role to be proactive, timely, and efficient. In this sense, respondents were to present their opinion on the 'responsibility' of organizations. 33.5% of the respondents stated that they found the Federal government 'not at all responsible,' followed by the Provincial government 'not at all' (38.6%). Similarly, 26.3% of the respondents state that they found NTB to be 'slightly responsible.'

The Government and NTB play a significant role in influencing tourism recovery, motivating industry, and presenting an appropriate image of tourism and the destination in the market. In this sense, respondents were to rate the role of these bodies in influencing positive tourism growth in the country. 30% of the respondents found the Federal government's role as 'slightly influential,' followed by 'not at all influential' (27.8%). Similarly, with regards to the Provincial government, 42.4% of respondents found 'not at all influential.' 29.7% of the respondents found NTB's position to be 'likely influential,' followed by 22.2% who stated 'not at all influential.'

Willingness to travel

56.3% of the respondents stated that they are 'willing to travel' for a vacation/holiday trip once the Government of Nepal relaxes travel and mobility restrictions. Similarly, 27.8% of the respondents were 'not sure' of taking a holiday/vacation trip as the stated 'maybe' responses. 15.8% reported that they would not make any such vacation/holiday trip.

There were varied reasons for the willingness or unwillingness to take a holiday/vacation. Most respondents (n=244) stated that they were tired and bored stuck at homes. Some respondents mentioned that they have been working from home during this lock time. As per respondents, it has become essential to take a break and get refreshed by indulging in recreation and relaxation activities.

Regarding financial and nonfinancial resources available to take holidays in the days to come, 60.4% of the respondents have the necessary funds. However, 39.6% stated they did not have such support. The reason for this was they were unemployed or are skeptical about the jobs post-COVID-19. It would be too early to think about taking any such holiday vacation by spending the resources that would be scarce then.

Conclusion

The COVID-19 has severely impacted the mobility of people, goods, and services in Nepal, including tourism. Nepalese leisure travelers are very willing to travel, once the government of Nepal relaxes restrictions related to travel and mobility. The majority of the respondents have required financial and non-financial resources to take a holiday/vacation once the COVID-19 situation becomes normal. From the responses, it is evident that they are frequent travelers and organize trips by themselves. Such behavior could be a crucial indicator for the travel trade industry, who, at the loss of the international market, might find it essential to consider. International tourism in Nepal will take some years to get back to normal, even if scientists find a vaccine for the COVID-19. The research found that travel agents/tour operators need to understand and appreciate Nepalese leisure tourists. Most of the Nepalese leisure tourist arrange their tours. Most importantly, Nepalese leisure travelers are inclined to spend more and travel to new destinations within the country. When Nepalese are willing to take holiday trips as soon as the government relaxes COVID related restrictions, it would be beneficial for the Nepalese tourism industry to come up with appropriate strategies to target this lucrative market.

Further research needs to generalize the findings. Additionally, the study needs to be done at the national level to ascertain Nepalese leisure travelers' tastes, preferences, and behavior by all levels of governments, Nepal Tourism Board, and the Industry to harness the opportunity and benefits that the Nepalese market segment will bring in the future. Understanding Nepalese tourists' choices and motivational factors will be an essential milestone in sustaining the ailing overall tourism economy and individual operators alike.

References

Abuamoud, I. N., Libbin, J., Green, J. & ALRousan, R. (2014). Factors affecting the willingness of tourists to visit cultural heritage sites in Jordan. *Journal of Heritage Tourism, 9* (2), 148-165.

Aljazeera (2020, 13 August 2020). *Sputnik V: what we know about Russia's coronavirus vaccine.* Aljazeera.com. URL: https://www.aljazeera.com/news/2020/08/sputnik-russia-coronavirus-vaccine-200813070859021.html

Aro, A. R., Vartti, A. M., Schreck, M., Turtiainen, P., & Uutela, A. (2009). Willingness to take travel-related health risks—a study among Finnish tourists in Asia during the avian influenza outbreak. *International Journal of Behavioral Medicine, 16*(1), 68-73.

Axhausen, K. W. (2007). Concepts of travel behaviour research. *Threats to the Quality of Urban Life from Car Traffic: Problems, Causes, and Solutions*, 165-185.

Baker, D. M. A. (2015). Tourism and the health effects of infectious diseases: are there potential risks for tourists?. *International Journal of Safety and Security in Tourism and Hospitality*, *1*(12), 1.

Baniya, R., & Paudel, K. (2016). An analysis of push and pull travel motivations of domestic tourists in Nepal. *Journal of Management and Development Studies, 27*, 16-30.

Bastola, A., Sah, R., Rodriguez-Morales, A.J., Lal, B.K., Jha, R., Ojha, H.C., Shrestha, B., Chu, D.K., Poon, L.L., Costello, A. & Morita, K. (2020). The first 2019 novel coronavirus case in Nepal. *The Lancet Infectious Diseases*, *20*(3), 279-280.

Beaumont, P. & Agencies (2020, 20 August). Global report: WHO in talks with Russia over Covid-19 vaccine. Theguardian.com. URL: https://www.theguardian.com/world/2020/aug/20/global-report-who-in-talks-with-russia-over-covid-19-vaccine

Builiung, R. N., & Kanaroglou, P. S. (2007). Activity–travel behaviour research: conceptual issues, state of the art, and emerging perspectives on behavioural analysis and simulation modelling. *Transport Reviews*, *27*(2), 151-187.

Calderwood, L.U. & Soshkin, M. (2019). *The Travel and Tourism Competitiveness Report 2019.* Geneva: World Economic Forum.

Catanzaro, M., Fagiani, F., Racchi, M., Corsini, E., Govoni, S. & Lanni, C. (2020). Immune response in COVID-19: addressing a pharmacological challenge by targeting pathways triggered by SARS-CoV-2. *Signal Transduction and Targeted Therapy*, *5*(1), 1-10.

Chen, J. S., Huang, Y. C. & Cheng, J. S. (2009). Vacation lifestyle and travel behaviors. *Journal of Travel & Tourism Marketing*, *26*(5-6), 494-506.

Centres for Disease Control and Prevention (2020). *Coughing and Sneezing.* URL: https://www.cdc.gov/healthywater/hygiene/etiquette/coughing_sneezing.html

Chen, J. Huang, Y. & Cheng, J. (2009). Vacation lifestyle and travel behaviors. *The Journal of Travel and Tourism Marketing, 26* (5), 494-506.

Chinazzi, M., Davis, J.T., Ajelli, M., Gioannini, C., Litvinova, M., Merler, S., y Piontti, A.P., Mu, K., Rossi, L., Sun, K. & Viboud, C. (2020). The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak. *Science*, *368*(6489), 395-400.

Cooper, C., Fletcher, J., Fyall, A., Gilber, D., & Wanhill, S. (2008*). Tourism: principles and practice* (4th ed.). Essex: Prentice-Hall.

Correia, J.D., Shafer, R.T., Patel, V. (2001). Blood and body fluid exposure as a health risk for international travel. *Journal of Travel Medicine*, *8*, 263–6.

Crompton, J. (1979). Motivations for pleasure vacation. *Annals of Tourism Research, 6*, 408–424.

Fang, H., Wang, L. & Yang, Y. (2020). *Human mobility restrictions and the spread of the novel coronavirus (2019-ncov) in China*, Working Paper 26906. National Bureau of Economic Research.

Farzanegan, M.R., Gholipour, H.F., Feizi, M., Nunkoo, R. & Andargoli, A.E. (2020). *International Tourism and Outbreak of Coronavirus (COVID-19): a cross-country analysis*. *Journal of Travel Research*, p.0047287520931593.

Felsenstein, S., Herbert, J.A., McNamara, P.S. & Hedrich, C.M. (2020). COVID-19: immunology and treatment options. *Clinical Immunology*, p.108448.

Florindo, H.F., Kleiner, R., Vaskovich-Koubi, D., Acúrcio, R.C., Carreira, B., Yeini, E., Tiram, G., Liubomirski, Y. & Satchi-Fainaro, R. (2020). Immune-mediated approaches against COVID-19. *Nature Nanotechnology*, 1-16.

Fonseca, P. & Boadle, A. (2020, 13 August). *Brazilian state agrees to produce Russian COVID-19 vaccine*. Reuters.com. URL: https://www.reuters.com/article/us-health-coronavirus-brazil/brazilian-state-agrees-to-produce-russian-covid-19-vaccine-idUSKCN2582MA

Gavi (2020, 06 August). The latest in the COVID-19 vaccine race. Gavi.org. URL: https://www.gavi.org/vaccineswork/covid-19-vaccine-race

Gostin, L.O. & Berkman, B.E. (2007). Pandemic influenza: ethics, law, and the public's health. *Administrative Law Review*, *59*, p.121.

Gurung, H. (1991). *Environmental Management of Mountain Tourism in Nepal.* Bangkok: ESCAP.

Handy, S. (1996). Methodologies for exploring the link between urban form and travel behavior. *Transportation Research Part D: Transport and Environment, 1*(2), 151-165.

Hanemann, M. (1991). Willingness to pay and willingness to accept: how much can they differ? *The American Economic Review, 81*(3), 635 –647.

Hanson, S., & Hanson, P. (1981). The travel-activity patterns of urban residents: dimensions and relationships to sociodemographic characteristics. *Economic geography, 57*(4), 332-347.

Haque, T.H. & Haque, M.O. (2018). The swine flu and its impacts on tourism in Brunei. *Journal of Hospitality and Tourism Management*, *36*, 92-101.

Hollingsworth, T.D., Ferguson, N.M. & Anderson, R.M. (2007). Frequent travelers and rate of spread of epidemics. *Emerging Infectious Diseases*, *13*(9), p.1288.

Holloway, J. C. (2004). *Marketing for Tourism.* New York: Prentice-Hall.

Huang, A., & Xiao, H. (2000). Leisure-based tourist behavior: a case study of Changchun. International *Journal of Contemporary Hospitality Management, 12* (3), 210-214.

Hufnagel, L., Brockmann, D. & Geisel, T. (2004). Forecast and control of epidemics in a globalized world. *Proceedings of the National Academy of Sciences, 101*(42), 15124–9.

Hung, K., & Petrick, J. F. (2011). Why do you cruise? Exploring the motivations for taking cruise holidays, and the construction of a cruising motivation scale. *Tourism Management, 32,* 386–393.

Jamal, T. & Budke, C. (2020). Tourism in a world with pandemics: local-global responsibility and action. *Journal of Tourism Futures*, 6 (2), 181-188.

Jayaweera, M., Perera, H., Gunawardana, B. & Manatunge, J. (2020). Transmission of COVID-19 virus by droplets and aerosols: a critical review on the unresolved dichotomy. *Environmental Research*, p.109819.

Jeng, J & Fesenmaier, D. (2002). Conceptualizing the travel decision making hierarchy: a review of recent developments. *Tourism Analysis, 7*, 15–32.

Kathmandupost.com (2019, December 16). *Nepal on Forbes' 10 bucket list trips for the next decade.* Kathmadupost.com. URL: https://tkpo.st/36Jz5PT

Kathmandupost.com (2016, October 25). *Lonely Planet crowns Nepal as world's 'best value destination' for 2017.* Kathmandupost.com. URL: https://kathmandupost.com/national/2016/10/25/lonely-planet-names-nepal-one-of-the-worlds-must-see-countries

Kommenda, N. & Hulley-Jones, F. (2020, 21 August). *Covid Vaccine tracker: when will we have a coronavirus Vaccine?* Theguardian.com. URL: https://www.theguardian.com/world/ng-interactive/2020/aug/21/covid-Vaccine-tracker-when-will-we-have-a-coronavirus-Vaccine

Korstanje, M.E. (2011). Swine flu in Buenos Aires: beyond the principle of resilience. *International Journal of Disaster Resilience in the Built Environment*, *2* (1), 59-73.

Kuo, H.I., Chen, C.C., Tseng, W.C., Ju, L.F. & Huang, B.W. (2008). Assessing impacts of SARS and Avian Flu on international tourism demand to Asia. *Tourism Management*, *29*(5), 917-928.

Kuo, H-I, C.L. Chang, Huang, B.W., Chen, C.C. & McAleer, M. (2009). *Avian Flu and International Tourism Demand: a panel data analysis.* Department of Applied Economics, 1892-1898.

Lai, S., Bogoch, I. I., Ruktanonchai, N. W., Watts, A., Lu, X., Yang, W., Yu, H., Khan, K. & Tatem, A. J. (2020). Assessing the spread risk of Wuhan novel coronavirus within and beyond China, January-April 2020: a travel network-based modeling study. medRxiv.

Laws, E. (1995). *Tourist Destination Management: Issues, Analysis and Policies*. London: Routledge.

Lean, H.H. & Smyth, R. (2009). Asian financial crisis, avian flu, and terrorist threats: are shocks to Malaysian tourist arrivals permanent or transitory?. *Asia Pacific Journal of Tourism Research*, *14*(3), 301-321.

MacCannell, D. (1973). Staged authenticity. *The tourist: A new theory of the leisure class* (3rd ed., 91–107). Berkeley, CA: University of California Press.

Mannell, R. C., & Iso-Ahola, S. E. (1987). Psychological nature of leisure and tourism experience. *Annals of Tourism Research, 14*(3), 314-331.

March, R. G. & Woodside, A. G. (2005). *Tourism Behavior: Travelers' Decisions and Actions.* Cambridge: CABI Publishing.

Ministry of Culture, Tourism, and Civil Aviation (MOCTCA) (2020). *Nepal Tourism Statistics, 2019*. Kathmandu: MOCTCA.

Ministry of Health and Population (MOHP) (2020). *COVID 19 web portal. Kathmandu:* MOHP. URL: https://covid19.mohp.gov.np/#/

MOCTCA (2016). *National Tourism Strategy, 2016–2025*. Kathmandu: MOCTCA.

MOCTCA (2009). *Nepal Tourism Statistics, 2008*. Kathmandu: MOCTCA.

Monterrubio, J.C. (2010). Short-term economic impacts of influenza A (H1N1) and government reaction on the Mexican tourism industry: an analysis of the media. *International Journal of Tourism Policy*, *3*(1), 1-15.

Navrud, S., & Ready, R. (2002). *Valuating Cultural Heritage: applying environmental valuation techniques to historic buildings, monuments, and artefacts.* Cheltenham: Edward Elgar.

Ng, B. & Ho, G. (2018). An Integrated Cognitive Perspective of Travel Motivation and Repeated Travel behavior. *The Journal of Cognitive Science, 2* (1), 60-69.

Nguyen, P. (2020, 14 August). *Vietnam to buy Russian COVID-19 vaccine.* Reuters.com. URL: https://www.reuters.com/article/us-health-coronavirus-vietnam-vaccine/vietnam-to-buy-russian-covid-19-vaccine-idUSKCN25A0M0

Pacific Asia Travel Association (PATA) Nepal (2018). *Vision 5 Million - Sustainable Development Goal in Tourism, 2018-2030: a preliminary concept paper.* Kathmandu: PATANepal.

Page, S., Song, H. & Wu, D.C. (2012). Assessing the impacts of the global economic crisis and swine flu on inbound tourism demand in the United Kingdom. *Journal of Travel Research*, *51*(2), 142-153.

Pavli, A., Tsiodras, S. & Maltezou, H.C. (2014). Middle East respiratory syndrome coronavirus (MERS-CoV): prevention in travelers. *Travel Medicine and Infectious Disease*, *12*(6), 602-608.

Pearce, D. G. (1993). Comparative studies in tourism research. In: D. Pearce and R. Butler (Eds.), *Tourism Research: Critiques and Challenges*. London: Routledge.

Pearce, P. L., & Caltabiano, M. (1983). Inferring travel motivations from travelers' experience. *Journal of Travel Research, 22*, 16–20.

Plog, S. C. (1974). Why destination areas rise and fall in popularity. *Cornell Hotel and Restaurant Quarterly, 14*(4), 55–58.

Poor, J., & Smith, J. (2004). Travel cost analysis of a cultural heritage site: The case of historic St. Mary's city of Maryland. Journal of Cultural Economics, *28*, 217 –229.

Poudel, K. & Subedi, P., 2020. Impact of COVID-19 pandemic on socioeconomic and mental health aspects in Nepal. *International Journal of Social Psychiatry*, p.0020764020942247.

Pradhan, T. R. (2020, July 21). *Government decides to lift the four-month-long coronavirus lockdown, but with conditions.* Kathmandupost.com. URL: https://kathmandupost.com/national/2020/07/21/government-decides-to-lift-the-four-month-long-coronavirus-lockdown-but-with-conditions

Prasai, S. (2019, May 26). *Nepal tourism generated Rs240b and supported 1m jobs last year: Report*. Kathmandupost.com.URL: https://kathmandupost.com/money/2019/05/26/nepal-tourism-generated-rs240b-and-supported-1m-jobs-last-year-report?fbclid=IwAR1sEKJ7czc8yQPl0Bgakc4kUwJQ0_pmQ2H-sFTKqCd1GuLPHp6bKwlsY6s

REANDA (2020). *Potential Impact of COVID-19 on Nepalese Economy*. Kathmandu; REANDA.

Recker, W. W., McNally, M. G., & Root, G. S. (1986). A model of complex travel behavior: Part I—Theoretical development. *Transportation Research Part A: General*, *20*(4), 307-318.

Ruiz Estrada, M. A., Park, D., & Lee, M. (2019). How a massive contagious infectious diseases can affect tourism, international trade, air transportation, and electricity consumption? The case of 2019 Novel Coronavirus (2019-nCoV) in China. URL: https://bit.ly/3kUP99c

Rvachev, L. A. & Longini, Jr. I. M. (1985). A mathematical model for the global spread of influenza. *Mathematical Biosciences, 75* (1), 3–22.

Saayman, M., & Saayman, A. (2009). Why travel motivation and socio-demographics matter in managing a national park. Koedoe, 51(1), 1–9.

Samdin, Z. (2008). Willingness to pay in Taman Negara: a contingent valuation method. *International Journal of Economics and Management, 2*(1), 81 –94.

Smith, S. L. J. (1985). U.S. Vacation travel patterns: correlates of distance decay and the willingness to travel. *Leisure Sciences: An Interdisciplinary Journal, 7(*2), 151-174.

Tass (2020, 08 July). *Russia, Germany discuss potential production of Russian COVID-19 vaccine in Germany.* Tass.com. URL: https://tass.com/world/1176285

Tatem, A.J., Hay, S.I. & Rogers, D.J. (2006). Global traffic and disease vector dispersal. *Proceedings of the National Academy of Sciences*, *103* (16), 6242-6247.

The National (2020, 23rd July). *Don't expect first COVID-19 vaccinations until early 2021, WHO says*. URL: https://www.thenational.ae/world/mena/don-t-expect-first-COVID-19-vaccinations-until-early-2021-who-says-1.1053240

Tuite, A.R., Bogoch, I., Sherbo, R., Watts, A., Fisman, D.N. & Khan, K. (2020). *Estimation of COVID-2019 burden and potential for international dissemination of infection from Iran*. medRxiv.

Ulak, N. (2020). A preliminary study of Novel Coronavirus Disease (COVID-19) outbreak: a pandemic leading crisis in tourism industry of Nepal. *Journal of Tourism and Hospitality Education*, *10*, 108-131.

United Nations (UN) Nepal (2020). *COVID-19 NEPAL: preparedness and response plan (NPRP).* URL: https://www.who.int/docs/default-source/nepal-documents/novel-coronavirus/covid-19-nepal-preparedness-and-response-plan-(nprp)-draft-april-9.pdf?sfvrsn=808a970a_2

United Nations World Tourism Organisation (UNWTO) (2020a). *UNWTO World Tourism Barometer*. Madrid: UNWTO.

UNWTO (2020b, 7 May). *International Tourist Number Could Fall 60-80% in 2020, UNWTO Reports*. URL: https://www.unwto.org/news/covid-19-international-tourist-numbers-could-fall-60-80-in-2020

University of Oxford (2020). *New study reveals Oxford coronavirus vaccine produces strong immune response*. Accessed on 21st July 2020 from URL: https://www.research.ox.ac.uk/Article/2020-07-20-new-study-reveals-oxford-coronavirus-vaccine-produces-strong-immune-response

Van Vuuren, C., & Slabbert, E. (2012). Travel motivations and behaviour of tourists to a South African resort. *Tourism & Management Studies*, 295-304.

WHO (2020b). *Numbers at a Glance.* Accessed on 23rd July 2020 from URL: https://www.who.int/emergencies/diseases/novel-coronavirus-2019

WHO (2020c). *Nepal Situation.* Assessed on 23rd July 2020 from URL: https://covid19.who.int/region/searo/country/np

WHO (2020d). *"Immunity passports" in the context of COVID-19: Scientific Brief.* Assessed on 10th July 2020 from URL: https://www.who.int/news-room/commentaries/detail/immunity-passports-in-the-context-of-covid-19

WHO (2020e). *Coronavirus disease (COVID-19) advice for the public*. Assessed on 23rd July 2020 URL: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

Wikipedia (2020). *COVID-19 Pandemic in Nepal*. URL: https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Nepal#cite_note-4

World Health Organisation (WHO) (2020a). *Coronavirus.* Accessed on 22nd July 2020. URL: https://www.who.int/health-topics/coronavirus#tab=tab_1

Weiss, S. R. & Navas-Martin, S. (2005). Coronavirus pathogenesis and the emerging pathogen severe acute respiratory syndrome coronavirus. *Microbiology and Molecular Biology Reviews, 69*(4), 635-664.

World Travel and Tourism Council (WTTC) (2018, December). *Impact of the Ebola Epidemic on Travel and Tourism*. London: WTTC. URL: https://wttc.org/Research/Insights

WTTC (2019). Travel & Tourism; Economic Impact 2019 Nepal. *Madrid: World Travel & Tourism Council*.

WTTC (2020). Nepal 2020 Annual Research: Key Highlights. URL: https://wttc.org/Research/Economic-Impact

Xie, L., & Ritchie, B. W. (2019). The motivation, constraint, behavior relationship: A holistic approach for understanding international student leisure travelers. *Journal of Vacation Marketing, 25*(1), 111-129.

Yang, H. Y., & K. H. Chen. (2009). A general equilibrium analysis of the economic impact of a tourism crisis: a case study of the SARS epidemic in Taiwan. *Journal of Policy Research in Tourism, Leisure and Events*, *1* (1): 37-60.

Yazdanpanah, F., Hamblin, M.R. & Rezaei, N. (2020). The immune system and COVID-19: friend or foe?. *Life Sciences*, p.117900.

Zuckerman, J. N., & Steffen, R. (2000). Risks of hepatitis B in travelers as compared to immunization status. *Journal of Travel Medicine*, *7*(4), 170-174.