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# What is the impact of COVID-19 on Foreign Tourist Arrivals (FTAs) in India from top fifteen Source Countries during 2019 &2020- A cross sectional study

### DR PIYUSH KUMAR<sup>1</sup>

1 B. R. Ambedkar Bihar University

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# Abstract

Abstract-Due to novel disease, poor management and stringent steps taken by the government as well as sudden increase in admissions at emergency department of hospitals the mortality rate had increased significantly due to COVID-19. Such a catastrophic situation might have reduced the foreign tourist arrivals in India due to several factors like fear, lack of transportation etc. In this modern era geographical knowledge of pattern of distribution of disease is essential while detecting, surveillance, monitoring and responding to any communicable infectious disease outbreak or NCD (non-communicable diseases) or any pandemic situations. Geospatial data of COVID-19 infections per million population reported by countries, territories and areas are under surveillance by national and international agencies such as World Health Organization in various countries. This paper is to find out the impact of COVID-19 on Foreign Tourist Arrivals (FTAs) in India from top 15 Source Countries during 2019 &2020 with aim to assess the impact of COVID-19 on Foreign Tourist Arrivals number and percentage share of tourists coming to India during pandemic era-2020 and pre-pandemic era 2019 were compared. The total numbers of FTAs in India during 2019 from all source countries were 10930355 which reduced to 2744766 during COVID-19 PANDEMIC ERA in 2020; a massive

decline by 8185589 numbers of tourists and 25.11percent compared to pre-pandemic era of 2019. On the other hand the total numbers of FTAs in India during 2019 from Total Top 15 Countries were 8340551 which decreased to 2061161 during COVID-19 PANDEMIC ERA in 2020; a huge decline by 6279390 numbers of tourists and 24.71percent compared to pre-pandemic era of 2019 while FTAs in India during 2019 from Other Countries were 2589804 reduced to 683605 during Covid-era 2020 (26.40% decrease). Tourism is one of the significant resources to generate foreign revenue for India. COVID-19 pandemic era, have affected the tourism sector negatively and this novel research study revealed that the national and international FTAs and revenue income are adversely affected detrimental for Tourism industry. The COVID-19 induced lockdown had resulted in closure of hotels; resorts etc., as well as ships, cruises, flights had been halted to check the spread of the COVID-19 pandemic which has resulted in revenue loss of 1.25

trillion rupees for the Indian tourism industry by 2020.

Keywords- COVID-19, pandemic era, tourist arrivals, India, foreign

What is the impact of COVID-19 on Foreign Tourist Arrivals (FTAs) in India from top fifteen Source Countries during 2019 & 2020- A cross sectional study

Dr Piyush Kumar<sup>1</sup>

1M.B.B.S. E.M.O.C., P.G.D.P.H.M., Senior General Medical Officer, Health Department, Government of Bihar, India, <u>drpiyush003@gmail.com</u> Advocate Anupama<sup>2</sup>

2 Senior Lawyer, Bar council, Patna, Bihar

#### Tourism

Abstract-Due to novel disease, poor management and stringent steps taken by the government as well as sudden increase in admissions at emergency department of hospitals the mortality rate had increased significantly due to COVID-19. Such a catastrophic situation might have reduced the foreign tourist arrivals in India due to several factors like fear, lack of transportation etc. In this modern era geographical knowledge of pattern of distribution of disease is essential while detecting, surveillance, monitoring and responding to any communicable infectious disease outbreak or NCD (noncommunicable diseases) or any pandemic situations. Geospatial data of COVID-19 infections per million population reported by countries, territories and areas are under surveillance by national and international agencies such as World Health Organization in various countries. This paper is to find out the impact of COVID-19 on Foreign Tourist Arrivals (FTAs) in India from top 15 Source Countries during 2019 & 2020 with aim to assess the impact of COVID-19 pandemic era (2020 as discussed above) by comparing it with pre-pandemic era of 2019. To assess the impact of COVID-19 on Foreign Tourist Arrivals number and percentage share of tourists coming to India during pandemic era-2020 and prepandemic era 2019 were compared. The total numbers of FTAs in India during 2019 from all source countries were 10930355 which reduced to 2744766 during COVID-19 PANDEMIC ERA in 2020; a massive decline by 8185589 numbers of tourists and 25.11percent compared to pre-pandemic era of 2019. On the other hand the total numbers of FTAs in India during 2019 from Total Top 15 Countries were 8340551 which decreased to 2061161 during COVID-19 PANDEMIC ERA in 2020; a huge decline by 6279390 numbers of tourists and 24.71 percent compared to pre-pandemic era of 2019 while FTAs in India during 2019 from Other Countries were 2589804 reduced to 683605 during Covid-era 2020 (26.40% decrease). Tourism is one of the significant resources to generate foreign revenue for India. COVID-19 pandemic era,

have affected the tourism sector negatively and this novel research study revealed that the national and international FTAs and revenue income are adversely affected detrimental for Tourism industry. The COVID-19 induced lockdown had resulted in closure of hotels; resorts etc., as well as ships, cruises, flights had been halted to check the spread of the COVID-19 pandemic which has resulted in revenue loss of 1.25 trillion rupees for the Indian tourism industry by 2020. Keywords- COVID-19, pandemic era, tourist arrivals, India, foreign

### Introduction

### Background/rationale

The Coronavirus disease -COVID-19 is a hazardous infection caused by recently revealed SARS-CoV-2 [1]. The first case was reported from China (Wuhan city) [2]. COVID-19 infection is highly contagious and spreads predominantly by droplets from the nose; saliva of an infected person sneezes or coughs [3]. The WHO, World Health Organization declared this outbreak a Worldwide Pandemic on the 11th of March 2020 [4]. Several countries, including India, have responded to this pandemic through a lockdown / shut-down of national/ international transportations-tourism, socio-economic, educational and cultural institutions, except few sectors associated with essential services such as health sector [5]. There are geographical variations in the distribution pattern / mortality of COVID-19 cases in India [6]. In this modern era geographical knowledge of pattern of distribution of disease is essential while detecting, surveillance, monitoring and responding to any communicable infectious disease outbreak or NCD (non-communicable diseases) or any pandemic situations. Geospatial data of COVID-19 infections per million population reported by countries, territories and areas are under surveillance by national and international agencies such as World Health Organization in various countries [7]. Geospatial data of COVID-19 infections offer a scope for the improvement of tourism by application of this knowledge to identify hotspot of infections for declarations of restricted zone for tourists. The first case of COVID-19 in India was documented in January 2020 which continued to increase day by day by leap and bounds disrupting socio-economic conditions with increased violence against women and even slowed down essential health services, hence period from January 2020 onwards is counted as the pandemic era which is still going on [8, 9, and 10]. The government of India ordered nationwide lockdown starting on 25/03/2020 and ending on 31/05/2020 to stop the chain of the proliferation of COVID-19; which had a massive impact on transportation as well as even essential services such as OPD (out-patient department) were significantly affected [11].

Due to novel disease, poor management and stringent steps taken by the government as well as sudden increase in admissions at emergency department of hospitals the mortality rate had increased significantly due to COVID-19 [12]. Such a catastrophic situation might have reduced the foreign tourist arrivals in India due to several factors like fear, lack of transportation etc.

### Objectives

In the light of above mentioned situation the key objectives of this paper is to find out the impact of COVID-19 on Foreign Tourist Arrivals (FTAs) in India from top fifteen Source Countries during 2019 &2020 with aim to assess the impact of COVID-19 pandemic era (2020 as discussed above) by comparing it with pre-pandemic era of 2019.

### Methods

### Study design

This is a cross-sectional research study to assess the impact on Foreign Tourist Arrivals (FTAs) in India from top fifteen

Source Countries during 2019 and 2020.

Setting

To assess the impact of COVID-19 on Foreign Tourist Arrivals number and percentage share of tourists coming to India

during pandemic era-2020 and pre-pandemic era 2019 were compared.

Participants

The participants were top fifteen Source Countries in number of foreign tourist's arrivals in India see table-2.

Variables

The variables are mentioned in Table-2.

Data sources/measurement

The data sources for this study are listed below with links in Table -1.

### Table-1- Data source

https://tourism.gov.in/sites/default/files/2020-04/India%20Tourism%20Statistics%202019.pdf

 $1.\ \underline{https://tourism.gov.in/sites/default/files/2020-04/India\%20 Tourism\%20 Statistics\%202019.pdf}{}$ 

2. https://data.gov.in/apis/6c0a9e43-360f-460b-91a1-02837d827f3a

3. Title : Top fifteen Source Countries for Foreign Tourist Arrivals (FTAs) in India during 2019 & 2020

 $4.\ https://data.gov.in/resource/top-fifteen-source-countries-foreign-tourist-arrivals-ftas-india-during-2019-2020$ 

5. https://visualize.data.gov.in/?inst=6c0a9e43-360f-460b-91a1-02837d827f3a

Bias

Only pre-pandemic year 2019 is taken for comparisons in this version one of study.

Study size

This study had covered all the 36 states and union territories of India.

Quantitative variables

Please see table-2 where all the quantitative variables are listed.

Statistical methods

Microsoft office and stata software was used for statistical analysis.

**Results** 

Table-2-Descriptive data - FTAs in 2019 and 2020 in India

Decrease percent

in 2020 21.30842 26.06373

29.17888

33.45705

29.03606

25.55901 22.18998 21.93006 26.37891

27.31429

21.28556 20.17179 24.01916 24.13192

24.71253

26.39601

25.11141

						Qeios, CC-BY 4.0
Country-2019	FTAs in India in 2019	%Share in 2019	Country-2020	FTAs in India in 2020	%Share in 2020	Decrease in number FTAs in 2020
BANGLADESH	2577727	23.6	BANGLADESH	549273	20	2028454
UNITED STATES	1512032	13.8	UNITED STATES	394092	14.4	1117940
UNITED KINGDOM	1000292	9.2	UNITED KINGDOM	291874	10.6	708418
AUSTRALIA	367241	3.4	CANADA	122868	4.5	244373
CANADA	351859	3.2	RUSSIAN FEDERATION	102166	3.7	249693
CHINA	339442	3.1	AUSTRALIA	86758	3.2	252684
MALAYSIA	334579	3.1	FRANCE	74243	2.7	260336
SRI LANKA	330861	3	GERMANY	72558	2.6	258303
GERMANY	264973	2.4	MALAYSIA	69897	2.5	195076
RUSSIAN FEDERATION	251319	2.3	SRI LANKA	68646	2.5	182673
FRANCE	247238	2.3	THAILAND	52626	1.9	194612
JAPAN	238903	2.2	JAPAN	48191	1.8	190712
THAILAND	169956	1.6	NEPAL	40822	1.5	129134
NEPAL	164040	1.5	CHINA	39586	1.4	124454

Total Top fifteen

Other Countries

AFGHANISTAN

Grand Total

Countries

The participant countries were selected according to number of tourist arrivals and percentage share were calculated and mentioned below as descriptive data Table-2.

2061161

683605

2744766

47561

75.1

24.9

100

1.7

6279390

1906199

8185589

The total numbers of FTAs in India during 2019 from all source countries were 10930355 which reduced to 2744766 during COVID-19 PANDEMIC ERA in 2020; a massive decline by 8185589 numbers of tourists and 25.11percent compared to pre-pandemic era of 2019. On the other hand the total numbers of FTAs in India during 2019 from Total Top fifteen Countries were 8340551 which decreased to 2061161 during COVID-19 PANDEMIC ERA in 2020; a huge decline by 6279390 numbers of tourists and 24.71percent compared to pre-pandemic era of 2019 while FTAs in India during 2019 from Other Countries were 2589804 reduced to 683605 during Covid-era 2020 (26.40% decrease).

Country wise statistics are shown in table-2 and figure-1. The important point is that Singapore was in top fifteen countries list of FTAs in India which was replaced by Afghanistan during 2020 Covid-19 era.

Bangladesh, United States and United Kingdom were top three source countries in terms of FTAs during the period of study accounting for 23.6%, 13.8%, and 9.2% of total share of FTAs during 2019 and 20%, 14.4% and 10.6% during 2020 respectively. The FTAs from these top three reduced in 2020 by 2028454 (21.3%), 117940 (26.06%) and

708418(29.18%) during 2020 for Bangladesh, United States and United Kingdom respectively. Australia registered largest decrease in FTAs in India with a decline of 33.46% while Singapore was in top fifteen countries list of FTAs in India which was replaced by Afghanistan during 2020 Covid-19 era see Table-2 and figure-1.

**Total Top fifteen** 

**Other Countries** 

Grand Total

SINGAPORE

Countries

8340551

2589804

10930355

190089

76.3

23.7

100

1.7





# Note - Singapore was in top fifteen countries list of FTAs in India which was replaced by Afghanistan during 2020 Covid-19 era; hence not compared.

### Discussion

Tourism industry is a major provider of employment growth and a key source of foreign revenue generation for the country [13]. This sector offers livelihoods for people working in various other sectors such as aviation sector, tourist guides, travel agencies, automobile sector, hotel sector, hospitality, and even health sector as commercial medical tourism, etc [14]. The Foreign Exchange Earnings in India from Tourism in INR terms during 2019 (1 crores = 10 million) was 1, 94,881 crores with annual Growth Rate of 9.6%; in US\$ terms US\$ 28.59 billion and annual Growth Rate 4.7% [15]. Foreign Tourist Arrivals (FTAs) during 2021(COVID-19 ERA) were 1.41 million (Jan-Dec) with a negative growth of 48.6% over same period of the previous year with Foreign Exchange Earnings (FEEs) during this period from Jan 2020 – Dec 2020 were Rs.50,136 crores (Provisional estimates) with a negative growth of 76.3% compared to same period of previous year; FEEs during this period during Jan 2020 – Dec 2020 in US\$ were 6.958 billion with a negative growth of 76.9% over same period of previous year [16]. Foreign Tourist Arrivals (FTAs) during 2020 were 24.62 million (Jan-Nov) with a **negative growth** of -74.6% compared to same period of the previous year. During 2020, a total of 8.38 million (Jan-Nov) foreign

tourists arrived on e-Tourist Visa registering a negative growth of -67.2%. Foreign Exchange Earnings (FEEs) during the period during Jan 2020 – March 2020 were Rs.44, 203 crores with a **negative growth** of -15.6% over same period of previous year; FEEs during the period during Jan 2020 – March 2020 in US\$ were 6.159 billion with a **negative growth** of -17.1% over same period of previous year [17]. Foreign Tourist Arrivals (FTAs) during 2019 were 10.89 million with a growth of 3.2% over same period of the previous year; During 2019, a total of 2.93 million foreign tourists arrived on e-Tourist Visa registering a growth of 23.6%; Foreign Exchange Earnings (FEEs) FEEs during the period during Jan 2019 – Dec 2019 were Rs.2, 10,981 crores with a growth of 8.3% over same period of previous year. FEEs during the period during 2019 were US\$29.962 billion with a growth of 4.8% over same period of previous year [18]. Tourism is one of the significant resources to generate foreign revenue for India. COVID-19 pandemic era, have affected the tourism sector negatively and this novel research study revealed that the national and international FTAs and revenue income are adversely affected detrimental for Tourism industry. The COVID-19 induced lockdown had resulted in closure of hotels, resorts etc., as well as ships, cruises, flights had been halted to check the spread of the COVID-19 pandemic which has resulted in revenue loss of 1.25 trillion rupees for the Indian tourism industry by 2020 [19].

### Conclusions

The ongoing COVID-19 pandemic is the major menace which global nations had ever faced, as this pandemic era has affected several sectors negatively including travel and tourism industry. This Coronavirus pandemic have an intensive global attack on security, life and livelihoods in India as well as global nations; pushing several nations into a weaker economy, hunger, violence, depression, slowdown with an uncalled crisis. The leadership of global major economy and global agencies like UN, WHO etc, including those directly involved in globalization should develop a robust framework to safeguards nations and citizens from such disasters.

### Limitations

This novel cross-sectional study is first of its kind discussing the **impact of COVID-19 on Foreign Tourist Arrivals** (FTAs) in India from top 15 Source Countries during 2019 & 2020. The key limitation is data and more description about impacts. This limitation will be reduced to a great in next version of this research study. Other information

### Fundina

The author declares that no funds are taken from any individual or agency-institution for this study.

## Abbreviation;

Coronavirus disease -COVID-19; Foreign Tourist Arrivals (FTAs); SARS-CoV- severe acute respiratory syndrome; WHO, World Health Organization; NCD (non-communicable diseases);Foreign Exchange Earnings (FEEs);INR-Indian National Rupee;

### References

1. WHO, World Health Organization- available at-<u>https://www.who.int/docs/default-source/coronaviruse/who-</u> rights-roles-respon-hw-covid-19.pdf

2. Piyush Kumar (2022) What Impacts Have Geographical Locations On The Cases And Deaths From Covid-19/SarsCov-2 Pandemic In 36 States And Union Territories Of India:-Observational Analysis In India. J Mari Scie Res Ocean, 5(1): 01-07 <u>https://doi.org/10.33140/JMSRO.05.01.01</u> 3. WHO, World Health Organization -Q&A: How is COVID-19 transmitted? - Available at

- https://www.who.int/vietnam/news/detail/14-07-2020-q-a-how-is-covid-19-transmitted

4. Dr. Piyush Kumar. (2022). What is the impact of Covid-19 on the Antenatal Care Services Utilization in Public-Private-Rural-Urban Hospitals of India during the COVID-19 Pandemic Period of 2020-2021 compared to prepandemic era 2018-2019?. MODERN APPLIED MEDICAL RESEARCH ISSN: 2582-9181, 2(2), 1–

10. https://doi.org/10.36099/mamr.220522

5. Piyush Kumar, Habib Hasan Farooqui. (2022). what is the Impact of Covid-19 Pandemic on the RCH (Reproductive and Child Health) Programme in Rajasthan, because of nationwide lockdown (April 2020 to June 2020)? J Cli Ped Chi Res, 3(1), 26-41. <u>https://doi.org/10.33140/JCPCCR.03.01.01</u>

6. Kumar P (2022) What Impacts have Geographical Locations on the Cases and Deaths from COVID-19/SARS-CoV-2 Pandemic in 36 States and Union Territories of India? Observational Analysis in India-V2. J Trop Dis. 10:310 <u>https://www.walshmedicalmedia.com/open-access/what-impacts-have-geographical-locations-on-the-</u> <u>cases-and-deaths-from-covid19sarscov2-pandemic-in-36-states-and-union-territories--109811.html</u>

7. WHO, World Health Organization -Global epidemiological situation- available

at- https://www.who.int/docs/default-source/coronaviruse/situation-reports/20201012-weekly-epi-update-9.pdf 8. Piyush Kumar. (2022). Impact of Covid-19 Pandemic era on Prevalence of Pregnant Women Sero-Positivity for Syphilis, Among Women Attending Antenatal Care in India and Babies Diagnosed with Congenital Syphilis-A Cross-Sectional Research Study. J Cli Ped Chi Res, 3(1), 67-77 <u>https://doi.org/10.33140/JCPCCR.03.01.05</u> 9. Piyush Kumar. (2022). What Impact Have SARS-CoV-2/Covid-19 Pandemic on Domestic Violence against Women in India across Different States and Union Territories from the Beginning of Lockdown Due To covid-19 pandemic in March 2020 till 20th September 2020?. J Cli Ped Chi Res, 3(1), 78-

83. https://doi.org/10.33140/JCPCCR.03.01.06

10. Piyush Kumar. (2022). what is the impact of covid-19 pandemic era on Pregnant Women sero-positivity for Syphilis among women attending antenatal care in India and number of babies diagnosed with Congenital Syphilis? J Cli Ped Chi Res, 3(1), 61-66 <u>https://doi.org/10.33140/JCPCCR.03.01.04</u>

11. Piyush Kumar, (2022). What Impact Have SARS-CoV-2/Covid-19 Pandemic induced lockdown on the number of OPD patients of Diabetes, Hypertension, Stroke (CVA), Acute Heart Disease, Mental Illness, Epilepsy, Ophthalmic, Dental and oncology in India during the lockdown months (April-May-2020)–Observational Research Analysis?. Int J Cancer Res Ther, 7(2), 51-62. <u>https://doi.org/10.33140/IJCRT.07.02.02</u>

12. Piyush Kumar, (2022). Impact of COVID-19 pandemic on mortality count at the Emergency Ward of Hospitals in India: A Cross-sectional study from January 2019 to May 2021. Adn Envi Was Mana Rec, 5 (1), 62-

73. <u>https://doi.org/10.33140/AEWMR.05.01.07</u>

 Rajender S. Godara, Durafshan Jaihoon Fetrat, Azatullah Nazari - Contribution of Tourism Industry in Indian Economy: an Analysis - <u>https://www.ijrte.org/wp-content/uploads/papers/v8i6/F8091038620.pdf</u> International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878 (Online), Volume-8 Issue-6, March 2020 Retrieval Number: F8091038620 /2020©BEIESP DOI:10.35940/ijrte.F8091.038620 Journal Website: <u>www.ijrte.org</u>
CDC – Centre for Disease Control- Medical Tourism: Travel to Another Country for Medical Care – available at - https://wwwnc.cdc.gov/travel/page/medical-tourism

15. IMPORTANT STATISTICS ON TOURISM DURING 2018- available at -<u>https://tourism.gov.in/sites/default/files/2020-</u>04/India%20Tourism%20Statistics%202019.pdf

16. Foreign Tourist Arrivals (FTAs) FTAs during 2021 – available at - Statistics, Surveys and Studies -<u>https://tourism.gov.in/sites/default/files/2022-03/Anuual%20Report%202021-22.pdf</u>

17. Foreign Tourist Arrivals (FTAs) FTAs during 2021 - available at - Statistics, Surveys and Studies

- https://tourism.gov.in/sites/default/files/2021-03/Annual%20Report%202021%20English.pdf

18. Statistics, Surveys and Studies - available at-https://tourism.gov.in/sites/default/files/2020-

02/Annual%20Report%20Tourism%202019\_20\_Final.pdf

19. Rajeev Singh Chandel, Shruti Kanga, Suraj Kumar Singh. Impact of COVID-19 on tourism sector: a case study of Rajasthan, India [J]. AIMS Geosciences, 2021, 7(2): 224-243. Doi: <u>https://doi.org/10.3934/geosci.2021014</u>

### **Declarations**

-This version of paper has not been previously published in any peer reviewed journal and is not currently under consideration by any journal. The document is Microsoft word with English (India) language & 2001 words excluding reference and declaration etc. (3025words Total including all).

-Ethics approval and consent to participate: Not applicable. This study has not involved any human or animals in real or for experiments. The submitted work does not contain any identifiable patient/participant information.

-Consent for publication: The author provides consent for publication.

-Availability of data and materials: The data sources are mentioned in the research paper.

-Conflicts of Interest/ Competing Interest: There are no conflicts / competing of interest

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### -Author contact information

Department of Health, Government of Bihar, MOBILE - +919955301119/+917677833752, Email drpiyush003@gmail.com