



Impact Assessment of Char Dham Yatra on Tourist Inflow in Uttarakhand: A Trend Analysis from 2000 to 2021

Amit Sharma^{1*} • Bhanu Prasad Naithani¹ • Mukesh Naithani²

¹Department of Geography, HNBGU Srinagar, Garhwal (Uttarakhand)

²Department of Geography, Balganga degree college sindhul Tehri Garhwal.

Corresponding Author: amitsharma7760@gmail.com

Received: 10.11.2024; Revised: 20.12.2024; Accepted: 20.12.2024

©Society for Himalayan Action Research and Development

Abstract: Char Dham Yatra is a pious pilgrimage comprised of Badrinath, Kedarnath, Gangotri, and Yamunotri located in the Garhwal Himalayas ranges in Uttarakhand, these are the four most sacred Hindu shrines that draw devotees from India and around the world. Through this paper, we have found out the trends of tourist inflow in Char Dham Yatra from 2000 to 2021 and suggest some measures to improve the pilgrimage tourists in Char Dham Yatra. This study includes both primary and secondary data. For the collection of primary data, field survey and observation methods are used and the secondary data is collected from books, journals, newspapers, the Uttarakhand Tourism Development Board (Dehradun), the Ministry of Tourism of Uttarakhand, the Ministry of Tourism of India, the tourism policy of Uttarakhand, and the Char Dham Yatra website. The data analyses were done through the software like SPSS, MS Excel and MS Word. In the paper we analyzed that tourism inflow decreased three times in these twenty-two years of span, firstly when the state of Uttarakhand separated from Utter Pradesh, secondly when the Kedarnath floods happened in 2013, and thirdly when COVID-19 hit the world. The tourism inflow is maximum in Badrinath followed by Kedarnath, Gangotri, and Yamunotri from 2000 to 2021. Tourism inflow is consistently increasing in Char Dham Yatra every year. The main reasons behind the increasing inflow of pilgrimage tourism in Char Dham Yatra are the Char Dham Road Project made this journey faster and more convenient, the better tourism policy of the state of Uttarakhand, registration on-call services for tourists, the helicopter services, dedicated portal and website of Char Dham Yatra. However fragile topography, less infrastructure and traffic congestion create hurdles in development of tourism inflow and development.

Keywords: Tourism • Chardham yatra • Pilgrimage • Uttarakhand Tourism Development Board.

Introduction

Tourism has become one of the world's largest and fastest-growing industries, it is an integral part of our Indian tradition and culture as well as a major contributor to economic, social, and physical development (Joveriya & Mariya 2019). Tourism is a strong force that ignites travel to explore nature, adventure, wonder, and society, discover cultures, meet people, interact with values, or experience new traditions and events. To develop and sustain the tourism industry, tourism development attracts tourists to a particular destination (Baloch et al 2023). According to the World Tourism Organization (UNWTO), tourism is one of the fastest-growing industries, contributing more than 10% to the global GDP, twenty-five million international tourists in 1950 grew to 166 million in 1970, reaching 1.442 billion in 2018 and projected to be 1.8 billion by 2030

(UNWTO Tourism Highlights: 2017 Edition 2017, Mikayilov et al 2019). Tourism is practiced in various ways, such as natural, cultural, historical, and adventure tourism. Cultural tourism is also known as pilgrimage tourism, in various categories of tourism in India, pilgrimage tourism is becoming important. It's an important segment of tourism dedicated to the promotion of peace and brotherhood (Sati 2023). Religious tourism has a major impact on economic development with this it also helps regions to grow, and residents to improve living standards and social ties in their communities. Religious tourism is also important from the point of view of the convergence of cultures and the mutual understanding of different religions (Hvizdová 2018). The Four important pilgrimage sites, Yamunotri, Gangotri, Kedarnath, and Badrinath, all of which form Char Dham in the backdrop of the great Himalayas, are located in



Uttarakhand, one of the country's major tourist destinations. Each year, these pilgrimage centres are attended by the highest number of pilgrims in northern India and have become a major gateway for religious tourism. The Char Dham Yatra starts in Yamunotri, goes to Gangotri, and finishes at Kedarnath and Badrinath (Semwal and Upreti 2019). Traditionally, the Char Dham Yatra is considered to be completed in a clockwise direction. The pilgrimage starts from Yamunotri, goes to Gangotri, ends at Kedarnath, and concludes in Badrinath. The Char Dham Yatra is a physically challenging journey, requiring trekking at an altitude of more than 4000 feet. Therefore, it is important to plan and prepare properly for this journey (Desk 2023). Countries hosting visitors to this mountain range are benefiting greatly from the booming tourism industry in the Himalayas. However, tourism to the Himalayas is also having a significant impact on the environment, even if this economic boost brings real benefits to the

region. Flooding in the lowlands has been caused by extensive deforestation in the mountain range, while pollution from vehicles is increasing, and waste left by trekkers is sometimes left unchecked (Angel 2018). The Char Dham Yatra is a huge source of income and employment for the state, bringing in over Rs 7,500 crore each year from increased pilgrim numbers. To increase revenue government has consistently used their fragile Himalayas beyond their carrying capacity which leads to many natural disaster events every year (Sehgal 2023)

Study Area: Uttarakhand is one of India's states, established on 9 November 2000. In the past, it was known as Kedarkhand, Manaskhand, and Uttaranchal. The territory of the state is 53,483 km², and it's spread throughout the country. 28°53'24"– 31°27'50"N and 77°34'27"– 81°02'22"E (Fig 1).

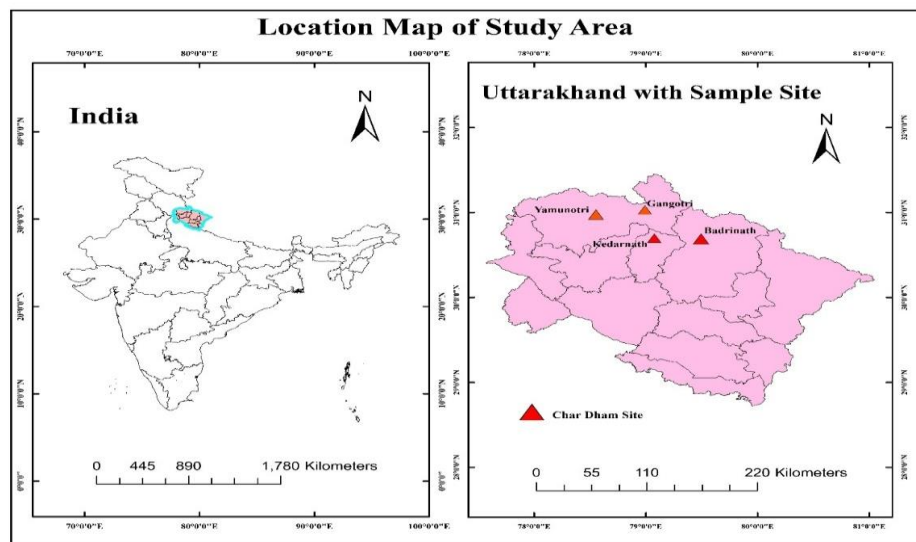


Fig 1: Map of the study area

The Garhwal and Kumaon regions are divided into two distinct geographical and administrative units in the state of Uttarakhand. In Uttarakhand, several temples are called Devbhoomi or the Land of Gods and they've been receiving pilgrims all year. One of the major pilgrimage sites in Uttarakhand, Char Dham Yatra is visited by pilgrims regularly. Four holy sites in the Himalayas, Yamunotri, Gangotri, Kedarnath, and Badrinath are to be visited during this yatra or pilgrimage. 'Char' in Hindi means

four, and 'Dham' is the name of a religious place. In Char Dham yatra Kedarnath lies in Rudraprayag, Badrinath lies in the Chamoli district of Uttarakhand, and Yamunotri and Gangotri lie in Uttarkashi district of Uttarakhand.

Objective

1. To identify the trend analysis of tourist inflow in Char Dham yatra from 2000 to 2021.
2. To suggest some measures to improve the tourist inflow in Char Dham Yatra.



Methodology

The study includes both primary and secondary data. For the collection of primary data, field survey and observation methods are used and the secondary data is collected through books, journals, newspapers, the Uttarakhand Tourism Development Board (Dehradun), the Ministry of Tourism of India, the Ministry of Tourism of Uttarakhand, the tourism policy of Uttarakhand, and the Char Dham Yatra website. The data analysis is done through the percentage method and using software like SPSS, MS Word, and MS Excel. The study area map of the Char Dham pilgrimage site is prepared using the Google Earth Pro and Arc GIS software. Firstly, the Char Dham pilgrimage site location is extracted through the Google Earth Pro software and the study area map is prepared through the mapping software Arc GIS. Through this paper, we have analyzed the pilgrimage inflow data from 2000 to 2021 and found out the trends analyses using data on yearly bases.

Results And Discussion

Tourist Inflow Trend Analysis in Char Dham Yatra From 2000 To 2021:

The first objective of the paper includes trend analyses of char Dham yatra. the results of the trend analyses are discussed on an individual basis in the discussion parts including Kedarnath, Badrinath, Gangotri, and Yamunotri in a sequenced manner. The maximum inflow of pilgrimage tourists arrived in Badrinath, followed by Kedarnath, Yamunotri, and Gangotri in the twenty-two years of span. The result analyses are discussed below:

Tourist inflow trend analyses for Kedarnath from 2000 to 2021 is presented in Table 1.

Through Table 1 we analyze that tourist inflow in Kedarnath was three lakhs in 2000 which decreased up to 1.93 lakh in 2001 and consistently decreased up to 2004. The reason behind the decrease in tourist inflows is the separation of the state of Uttarakhand from the state of Utter Pradesh, during this process of separation there

were many political agitations and protests on the streets thus the tourist inflow decreased. After 2005 the tourist inflow again started increasing because the state was running with stability and initiatives like tourism policy up to 2007 in which tourist inflow reached 5.5 lakhs. After 2007 the tourist inflow again started declining up to 2010 due to natural disasters like earthquakes and frequent landslide events. After 2010 tourist inflow again started increasing up to 2012 reaching 5.73 lakhs. In 2013, a glacial lake outburst happened in Kedarnath in which many people lost their lives due to heavy floods. Through this event, the tourist inflow suddenly dropped in Kedarnath in 2013, 2014, and 2015 (because of damaged infrastructure and fear among the people of another disaster). After 2015 the tourist inflow again started increasing, reaching more than 10 lakhs in 2019 which is highest highest-ever tourist inflow in 21 years of spans. In the year 2020 tourist inflow suddenly decreased to 1.35 lakhs, the reason behind that is the abandonment of Char Dham Yatra due to covid-19 pandemic. The impact of this pandemic was seen in the year 2021 too in which tourist inflow was 2.43 lakhs in Kedarnath. The tourist inflow in Badrinath is more than six lakhs in the year 2000, in which there was no foreigner inflow all the people from India (Table 2). After 2000 the tourist inflow started decreasing up to the year 2004, and the reason behind the decreasing trend is the separation of the state of Uttarakhand from the state of Utter Pradesh, during this process of separation there were many political agitations and protests on the streets thus the tourist inflow decreased. After 2005 tourist inflow trend again started to increase and up to 2008, more than ten lakh pilgrims visited the Badrinath. In 2009 the total tourist inflow in Badrinath was 798204 of which 99.8% is from India and 0.02% from foreign pilgrimage, the reason behind the decreasing inflow is natural disasters like earthquakes and frequent landslide events in the state. After 2009 tourist inflow started to increase and reached 10.46 lakhs in 2012.



Table 1: Tourist Data inflow in Kedarnath from 2000-2021.

YEAR	KEDARNATH				
	Indian	Indian %	Foreigner	Foreigner %	Total
2000	30000	100	0.00	0	30000
2001	191465	98.8	2163	1.12	193628
2002	167520	99	1697	1.00	169217
2003	231988	98.93	2509	1.07	234497
2004	275149	99.55	1257	0.45	276406
2005	378162	98.74	4811	1.26	382973
2006	485464	99.68	1539	0.32	487003
2007	555918	99.73	1505	0.27	557423
2008	468982	99.77	1066	0.23	470048
2009	402633	99.75	1003	0.25	403636
2010	400243	99.93	268	0.07	400511
2011	569863	99.85	738	0.13	570701
2012	572454	99.88	598	0.10	573152
2013	333693	99.95	81	0.02	333874
2014	40718	99.20	228	0.56	41046
2015	153821	99.54	614	0.40	154535
2016	309069	99.74	695	0.22	309864
2017	470517	99.83	718	0.15	471335
2018	730387	99.77	1604	0.22	732091
2019	998956	99.88	1065	0.11	1000121
2020	135287	99.88	62	0.05	135449
2021	242985	99.95	27	0.01	243112

Source: Uttarakhand Tourism Development Board .

The pilgrimage tourist inflows suddenly decreased after the 2013 Kedarnath floods due to the abandonment of the Char Dham yatra because of infrastructure challenges and fair in the mind of people that the same type of natural disaster event again happened shortly. Tourism in Badrinath started increasing in 2016-2017 and it faced a maxim pilgrimage in 2019 around 12.49 lakhs which was the maximum in the entire history of Char Dham yatra. In the years 2020 and 2021, there was a sudden decrease in tourist inflow which is 1.55 lakhs and 1.99 lakhs respectively which is the minimum in the history of Badrinath yatra. The reason behind the sudden decrease in pilgrimage inflow is the COVID-19 pandemic which created a hue and cry not only in the state of Uttarakhand but all over the nation and world.

Through this table we analyze that tourist inflow in Gangotri is more than two lakhs which decreased up to 1.31 lakh in 2001 and consistently decreased

up to 2004. The reason behind the decrease in tourist inflows is the separation of the state of Uttarakhand from the state of Uttar Pradesh, during this process of separation there were many political agitations and protests on the streets thus the tourist inflow decreased. After 2005 the tourist inflow again started increasing because the state was running with stability and initiatives like tourism policy up to 2012. In 2013, a glacial lake outburst happened in Kedarnath in which many people lost their lives due to heavy floods. Through this event, the tourist inflow suddenly dropped in Gangotri in 2013, 2014, and 2015 is 2.1 lakhs, 51 thousand, and 1.6 lakhs respectively. After 2015 tourist inflow again started increasing which reached 4.47 lakhs in the year 2018. The maximum tourist inflow in Gangotri was seen in the year 2019 which is 5.30 lakhs. In the years 2020 and 2021 very low flow of tourists comes in Yamunotri Dham which is 23 thousand and 33



thousand respectively. The reason behind the sudden decrease in pilgrimage inflows is the COVID-19 pandemic and due to this global

pandemic, yatra is suspended in these years many time

5.1.2 Tourist inflow trend analyses for Badrinath from 2000 to 2021 is presented in Table 2:

Table 2: Tourist inflow in Badrinath from 2000 to 2021

YEAR	BADRINATH				
	Indian	Indian %	Foreigner	Foreigner %	Total
2000	695332	100	0	0	695332
2001	430044	99.99	21	0.004	430065
2002	448517	99.98	80	0.017	448597
2003	580913	99.99	30	0.005	580943
2004	500579	100	0	0	500579
2005	566224	100	0	0	566224
2006	695230	100	12	0.002	695242
2007	768025	99.99	82	0.010	768107
2008	1075372	99.98	211	0.19	1075583
2009	798063	99.98	141	0.017	798204
2010	921250	99.97	276	0.030	921526
2011	935680	99.94	492	0.053	936172
2012	1046297	99.96	322	0.031	1046619
2013	476278	99.96	152	0.032	476430
2014	159405	99.89	170	0.107	159575
2015	366306	99.95	149	0.041	366455
2016	654140	99.96	215	0.033	654355
2017	920078	99.95	388	0.042	920466
2018	1046987	99.89	1064	0.102	1048051
2019	1244100	99.92	893	0.072	1244993
2020	155009	99.97	46	0.030	155055
2021	199406	99.99	3	0.002	199409

Source: Uttarakhand Tourism Development Board .

The tourist inflow in Yamunotri was 88672 thousand in 2000 which was consistently decreasing up to 2003, the reason behind the decreasing trends is the separation of Uttarakhand state from the state of Uttar Pradesh and many political agitations and protests decreased the inflow. After 2003 the tourist inflow started increasing up to 2011 in which the pilgrimage inflow was 4.48 lakhs which is the second highest number in Yamunotri Dham from 2000 to 2021. The reason behind the increasing tourist inflow is improved tourism policy and focus on infrastructure development to increase the tourism inflow.

The tourist inflow in Yamunotri was 88672 thousand in 2000 which was consistently decreasing up to 2003, the reason behind the decreasing trends is the separation of Uttarakhand state from the state of Uttar Pradesh and many political agitations and protests decreased the inflow. After 2003 the tourist inflow started increasing up to 2011 in which the pilgrimage inflow was 4.48 lakhs which is the second highest number in Yamunotri Dham from 2000 to 2021. The reason behind the increasing tourist inflow is improved tourism policy and focus on infrastructure development to increase the tourism inflow. In 2013 due to the Kedarnath floods the



tourist inflow in Yamunotri was drastically reduced in 2014 and reached 38 thousand only. In the years 2015, 2016, and 2017 the tourist inflow was 1.22 lakhs, 1.55 lakhs, and 3.92 lakhs respectively. The maximum tourist inflow seen in the year 2019 was 4.65 lakhs, the reason behind the increasing tourist inflow is the Char Dham project to widen the national highway so tourist

inflow increases in Char Dham Yatra implemented by the Ministry of Road Transport and Highway and better tourism policy. In 2020 tourist inflow in Yamunotri was 7738 and 33311 respectively, the reason behind the sudden decrease in tourists was covid-19 pandemic, and in this pandemic season, the yatra has been suspended many times.

Tourist inflow trend analyses for Gangotri from 2000 to 2021 is presented in Table 3

Table 3: Tourist inflow in Gangotri from 2000 to 2021

YEAR	GANGOTRI				
	Indian	Indian %	Foreigner	Foreigner %	Total
2000	208407	100	0	0	208407
2001	131311	99.85	188	0.14	131499
2002	118221	99.87	153	0.12	118374
2003	139752	99.87	182	0.13	139934
2004	160540	99.81	299	0.18	160839
2005	222834	99.89	227	0.10	223061
2006	263557	99.90	250	0.09	263807
2007	329111	99.91	274	0.08	329385
2008	326081	99.91	285	0.08	326366
2009	379673	99.87	483	0.12	380156
2010	310255	99.90	306	0.09	310561
2011	484826	99.93	311	0.06	485137
2012	435220	99.92	332	0.07	435552
2013	209919	99.84	320	0.15	210239
2014	51555	99.73	139	0.26	51694
2015	159684	99.68	508	0.31	160192
2016	284350	99.61	1109	0.38	285459
2017	408275	99.88	463	0.11	408738
2018	447239	99.86	599	0.13	447838
2019	529880	99.91	454	0.08	530334
2020	23736	99.84	38	0.16	23774
2021	33771	100	0	0	33771

Source: Uttarakhand Tourism Development Board

Tourist inflow trend analyses for Yamunotri from 2000 to 2021 is presented in Table 4

Table 4: Tourist inflow in Yamunotri from 2000 to 2021

YEAR	YAMUNOTRI				
	Indian	Indian %	Foreigner	Foreigner %	Total
2000	88672	100	0	0	88672
2001	54015	99.89	59	0.10	54074
2002	53976	99.91	47	0.08	54023
2003	77998	99.93	52	0.06	78050
2004	102194	99.86	137	0.13	102331
2005	168889	99.91	147	0.08	169036



2006	216723	99.92	160	0.07	216883
2007	287688	99.93	182	0.06	287870
2008	327421	99.94	190	0.05	327611
2009	322001	99.92	241	0.07	322242
2010	309452	99.94	182	0.05	309634
2011	448751	99.95	194	0.04	448945
2012	413367	99.94	248	0.06	413615
2013	253023	99.96	87	0.03	253110
2014	38208	99.77	86	0.22	38294
2015	122710	99.82	216	0.17	122926
2016	154563	99.63	566	0.36	155129
2017	391732	99.87	476	0.12	392208
2018	393963	99.87	482	0.12	394445
2019	465111	99.90	423	0.09	465534
2020	7717	99.85	11	0.14	7728
2021	33311	100	0	0	33311

Source: Uttarakhand Tourism Development Board .

Suggestive Measures to Improve the Tourist Inflow in Char Dham Yatra:

Through the help of secondary data and primary data observed through the field observation methods we have some suggestive measures to improve the tourist inflow in Char Dham Yatra:

Better tourism policy: The tourism policy of the state of Uttarakhand is revised every year for improvement in the tourism sector which also helps to improve tourism in every domain, but still on some aspects like ecotourism, sustainable tourism, and carrying capacity of this char Dham need to focus on for better tourism inflow in state of Uttarakhand

Traffic congestion: The problem of traffic congestion is especially seen in the state of Uttarakhand during the yatra season. This problem is often seen in this route of Char Dham but the Rishikesh bypass station is flooded with vehicles during June, July, and August. Through our observation and discussion with the people, we have found that people are struck more than 6 hours of traffic congestion along these stations of Rishikesh bypass on NH-07 highway. The reason behind the traffic congestion is the lack of traffic signals and lights and improper planning ahead of yatra season.

Natural disaster management plan: The char dam lies in the Himalayan region and thus the

weather is very unpredictable here and natural disasters like earthquakes, landslides, and floods are more frequently seen in the yatra season. This event created fear in the minds of people and thus we have seen their repercussions in the tourist inflow in Char Dham yatra after the tragedy of the Kedarnath floods in 2013 which sudden drop in tourist inflow in the yatra season. Thus, the state disaster management authority (SDMA) needs to prepare itself for the natural disasters that frequently happen in the state of Uttarakhand.

Altitude sickness: Altitude sickness creates hindrances in the tourist inflow, especially those people which belongs to the plain areas, senior citizens, and people suffering from non-communicable diseases. Thus, the government of Uttarakhand includes helicopter services in Kedarnath to cope with all of these problems, in a similar manner these services can be included in the other three Dham too.

Poor infrastructure: The infrastructure is a big challenge to Uttarakhand's hilly states, like not having proper roads and medical facilities, which is one of the main causes of less tourist inflows in Char Dham Yatra.

Conclusion

Char Dham yatra not only increases the economic well-being of the state of Uttarakhand but also boost the economic condition of the nation.



Through the tourist inflow data from 2000 to 2021, we have concluded that tourist inflow consistently increased every year during the Char Dham yatra except the events when the state of Uttarakhand separates from Uttar Pradesh, Kedarnath floods, and the covid-19 pandemic. The tourist inflow is maximum in Badrinath (12.44 lakhs in 2019) compared to Kedarnath (10 lakhs in 2019). The reason behind that is Badrinath Dham is one of the Char Dhams of India (like Rameshwaram, Jagannath-puri, and Dwarka) and transportation easily reaches to nearby the temple of Badrinath but on the other hand side people need to track 16 km to reach the Kedarnath temple and altitude sickness is one of the main problems for senior citizens and people who suffering from non -communicable diseases. Similarly, tourist inflow in Gangotri and Yamunotri is much less compared to the Badrinath and Kedarnath temples because road connectivity is not as good, natural disasters are frequently seen on this track, and not as popular compared to the other two temples. The government of Uttarakhand and India nowadays started many infrastructure initiatives like the Char Dham Road project to widen the national highways of Uttarakhand so that tourism inflow in Char Dham yatra expands and the similar note Rishikesh-Karan Prayag railway lines project is started to boost the tourism industry in the state of Uttarakhand. The Helicopter Services in Kedarnath started to mitigate the problems of senior citizens who have problems with Altitude sickness and suffer from non -non-communicable diseases too. Moreover, to increase the tourist inflow in the state of Uttarakhand government of Uttarakhand's design tourism policy of Uttarakhand 2023 is in such a manner that it includes every domain like community participation, sustainable tourism, ecotourism, and use of social media influencers.

References

Angel M (2018). Tourism to the Himalayas causes a mountain of problems.

- <https://www.businessdestinations.com/destination/s/tourism-to-the-himalayas-causes-a-mountain-of-problems>.
- Baloch Q B, Shah S N, Iqbal N, Sheeraz M, Asadullah M, Mahar S, & Khan A U (2023). Impact of tourism development upon environmental sustainability: a suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research*, 30(3), 5917–5930. .
- Desk L (2023). Char Dham Yatra: A comprehensive guide to the sacred pilgrimage. *The Indian Express*. <https://indianexpress.com/article/lifestyle/destination-of-the-week/char-dham-yatra-sacred-pilgrimage-details-dos-donts-health-advisory-8605231/>
- Hvizdová E (2018). RELIGIOUS TOURISM AND ITS SOCIO-ECONOMIC DIMENSIONS. *European Journal of Science and Theology*, Vol.14, No.2, 89-98.
- Joveriya J & Mariya (2019). Problems and prospects of tourism industry in Uttarakhand. *International Journal of Geography, Geology and Environment*, 1(1), 10–16.
- Mikayilov J I, Mukhtarov S, Mammadov J, & Azizov M (2019). Re-evaluating the environmental impacts of tourism: does EKC exist? *Environmental Science and Pollution Research*, 26(19), 19389–19402.
- Sati V P (2023). Pilgrimage tourism in Uttarakhand Himalaya: Pilgrims' inflows and trends. *Journal of Multidisciplinary Academic Tourism*, 8(2), 109–117. .
- Sehgal (2023). *Char Dham Yatra: Mess in the Mountains*.
<https://www.nationalheraldindia.com/india/char-dham-yatra-mess-in-the-mountains>.
<https://www.nationalheraldindia.com/india/char-dham-yatra-mess-in-the-mountains>
- Semwal S & Upreti B M (2019). *Chardham Yatra: A Trend of Tourism Before and After 2013 Flash Floods, Uttarakhand Himalaya*. <https://doi.org/10.4444/ijrr.1002/1471>



Sharma A, Singh S, Singh, M., & Naithani B.P (2023). Mitigating Road Hazards: A Comprehensive Impact Assessment of Road Accidents and Identification of Accident-Prone Areas On NH-07 From Rishikesh to Srinagar Garhwal, Uttarakhand. *Journal of Namibian Studies: History Politics Culture*, 36, 238-249.

UNWTO Tourism Highlights: 2017 Edition. (2017). World Tourism Organization (UNWTO).