

Tourism Growth, Spatial Concentration, and Regional Imbalance in Uttarakhand, India: A Longitudinal Assessment of 28 Major Destinations (2000–2023)

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ABSTRACT

This study examines the long-term temporal dynamics and destination-wise distribution of tourist arrivals across 28 major tourist destinations in Uttarakhand, India, using annual statistics for 2000-2023. The dataset distinguishes Indian and foreign tourist arrivals and provides destination-level totals. Descriptive trend analysis, year-on-year change, compound annual growth rate (CAGR), destination ranking, market-share analysis, and pre-pandemic/post-pandemic comparison were applied. Aggregate arrivals increased from 11,135,580 in 2000 to 39,225,740 in 2019, representing a 252.3% increase and a CAGR of 6.85%. The series records a sharp contraction in 2020, when total arrivals fell by 79.9% from the 2019 level. Recovery was rapid thereafter: total arrivals reached 59,636,601 in 2023, 52.0% above the 2019 level. Haridwar remained the dominant destination throughout the period, accounting for 62.2% of all recorded arrivals in 2023. Indian tourists accounted for the overwhelming majority of arrivals, while foreign arrivals, although much smaller in number, showed a distinct recovery pattern after 2020. The results indicate strong growth in the tourism system but also substantial spatial concentration in a limited number of destinations. The study argues for destination diversification, improved carrying-capacity management, resilient tourism infrastructure, and stronger monitoring of emerging and environmentally sensitive destinations.

Keywords: Uttarakhand Tourism, Tourist Arrivals, Spatial Distribution, Tourism Concentration, Garhwal–Kumaon Comparison

INTRODUCTION

Tourism is an important component of Uttarakhand's regional economy because the state combines pilgrimage centres, mountain and leisure destinations, wildlife attractions, adventure landscapes, cultural sites and gateway towns. This diversity creates a heterogeneous tourism system in which destinations differ in visitor intensity, purpose and environmental sensitivity (Sati, 2020). The present study evaluates tourist arrivals at 28 major destinations from 2000 to 2023 using annual records of Indian, foreign, and total visitors. The long time series permits assessment of long-term growth, inter-annual fluctuations, the sharp contraction in 2020 and the subsequent recovery. It also allows destination-level

comparison and examination of whether aggregate growth has been accompanied by spatially balanced development. Tourism growth in the Himalaya creates economic opportunities but also intensifies pressures on infrastructure and fragile environments. Uttarakhand have linked rapid visitor growth, unplanned development, and ecological sensitivity to the need for strategic and sustainable tourism planning (Sati, 2020; Chakraborty *et al.*, 2021). Carrying-capacity research further shows that transport, accommodation and infrastructure conditions influence destination development and that visitor management should be incorporated into sustainable planning (Gangwar *et al.*, 2018; Sati, 2018). Recent Char Dham research likewise demonstrates that sustainable visitor limits vary by destination, depending on physical,

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ecological, and socioeconomic conditions (Kuniyal *et al.*, 2025). Pilgrimage tourism is central to Uttarakhand's tourism structure, particularly through Badrinath, Kedarnath, Gangotri and Yamunotri (Sharma *et al.*, 2024) identified substantial fluctuations in Char Dham tourist inflows during 2000-2021, including declines associated with state formation, the 2013 Kedarnath disaster and COVID-19, while improved connectivity, tourism policy, registration systems, helicopter services and digital platforms supported growth. At the same time, fragile topography, inadequate infrastructure and congestion remain important constraints. Environmental quality is also relevant to tourism demand; (Yadav *et al.*, 2025) found that variations in air quality were associated with changes in foreign tourist arrivals in Delhi-NCR, highlighting the broader importance of environmental conditions for destination attractiveness. Ecotourism studies emphasise Uttarakhand's substantial natural resource potential but also identify remoteness, rugged terrain, hazards, and inadequate infrastructure as constraints, supporting approaches based on destination circuits and improved institutional support (Sati, 2021; Chaudhary *et al.*, 2022). Policy frameworks similarly emphasise new destinations, basic amenities, community participation, disaster-resilient infrastructure and balanced regional development. In contrast, the 2023 policy promotes sustainable tourism and decongestion through satellite nodes (Government of Uttarakhand, 2018, 2023). The supplied statistics provide a consistent destination-wise series over a long period, but the information is typically presented in annual tables rather than as an integrated longitudinal assessment. A systematic synthesis is useful for identifying structural trends, periods of acceleration or decline, destination concentration, and the extent to which the post-2020 recovery restored or exceeded earlier levels. The present paper addresses this analytical gap through a unified 2000-2023 framework.

Study Area

Uttarakhand is a Himalayan state in northern India characterised by marked physiographic, cultural and tourism diversity. The present study covers the 28 major tourist destinations included in the supplied annual tourism statistics series for 2000-2023. These destinations encompass pilgrimage centres, hill stations, gateway towns, wildlife attractions and nature-based tourism locations distributed across the Garhwal and Kumaon divisions. For the division-wise analysis, the destinations

were grouped into Garhwal and Kumaon using the regional classification adopted for this study. Garhwal includes Dehradun, Rishikesh, Mussoorie, Pauri, Srinagar, Kotdwar, Rudraprayag, Kedarnath, Gopeshwar, Joshimath, Badrinath, Auli, Hemkund Sahib, Valley of Flowers, Tehri, Uttarkashi, Gangotri, Yamunotri and Haridwar. Kumaon includes Almora, Ranikhet, Kausani, Bageshwar, Pithoragarh, Champawat, Nainital, Kathgodam, Corbett National Park, and Udham Singh Nagar. This grouping enables a direct comparison of the aggregate tourism structure of the two divisions from the same destination-level observations.

Research Objectives

1. To examine the temporal dynamics and long-term growth of tourist arrivals, including Indian and foreign visitors, across 28 major tourist destinations of Uttarakhand during 2000-2023.
2. To analyse destination-wise and division-wise tourism patterns, with particular emphasis on the comparative performance of the Garhwal and Kumaon divisions and the spatial concentration of tourist arrivals.
3. To assess the 2020 tourism disruption and subsequent recovery and to derive implications for balanced, resilient and sustainable tourism planning in Uttarakhand.

METHODOLOGY

Data source

The primary secondary data source is the Uttarakhand Tourism Development Board, Regional Office, Dehradun. The study uses two tourism-statistics datasets covering 2000-2020 and 2021-2023. The tables report 28 destinations and, for each year, the numbers of Indian and foreign tourists, and the corresponding total. The 2000-2020 dataset is organised into successive three-year periods, from 2000-2002 through 2018-2020, while the 2021-2023 dataset provides annual values for 2021, 2022 and 2023. For consistency, the destination labels were harmonised for analysis where the source contains obvious spelling variants-for example, 'Massoorie' was treated as Mussoorie, 'Nanital' as Nainital, and 'Velly of Flower' as Valley of Flowers. These are label harmonisations only; the numerical observations were retained as reported in the supplied tables.

Analytical framework

The analysis uses descriptive and comparative statistics rather than inferential modelling because the supplied material is a complete annual series for the selected destinations, not a sample survey. The following measures were calculated:

Annual Total Tourist Arrivals

$$T_t = \text{Indian}_t + \text{Foreigner}_t$$

Year-on-Year (YoY) Growth

$$Y_0 Y_t = \frac{T_t - T_{t-1}}{T_{t-1}} \times 100$$

Foreign Tourist Share

$$\text{FShare}_t = \frac{\text{Foreigner}_t}{T_t} \times 100$$

Destination Share

$$\text{DShare}_{i,t} = \frac{T_{i,t}}{\sum_i T_{i,t}} \times 100$$

Compound Annual Growth Rate

$$(\text{CAGR}) [(V_{\text{start}} V_{\text{end}})^{1/n-1}] \times 100$$

Recovery ratio:

2023 arrivals were compared with both 2020 and the pre-pandemic benchmark year 2019.

The analysis was performed from the destination-level observations and independently summed to obtain annual aggregate values. The annual totals reproduced from the destination rows are consistent with the totals reported at the bottom of the supplied tables for the respective years. The analysis treats the reported figures as tourist visits/arrivals recorded at destinations; it does not assume that every observation represents a unique individual visitor.

Conceptual Framework

The study conceptualises tourism development as a system with four interconnected dimensions: (i) temporal growth in visitor volume, (ii) market composition represented by Indian and foreign arrivals, (iii) spatial concentration across destinations, and (iv) resilience to major disruptions. Visitor growth is treated as an indicator of tourism demand rather than as a direct measure of

economic welfare. Spatial concentration is interpreted as a planning indicator because very high concentration may increase pressure on infrastructure and ecological resources at particular destinations. Resilience is assessed through the magnitude of the 2020 decline and the subsequent restoration of visitor volume.

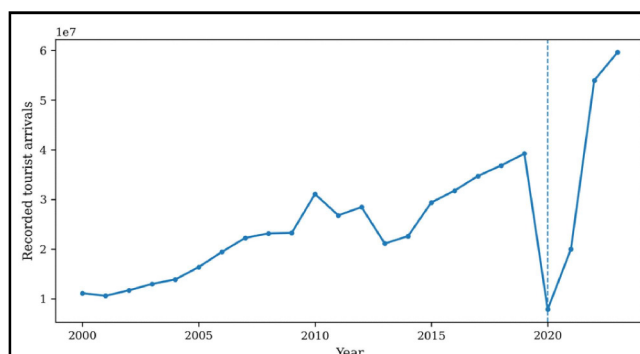
Additional Statistical Measures

To strengthen the descriptive analysis, the study additionally calculates the coefficient of variation (CV) for the annual aggregate series, a linear time trend, the five-destination concentration ratio (CR5), and the Herfindahl-Hirschman Index (HHI). The CV is defined as the standard deviation divided by the mean and expressed as a percentage. CR5 represents the combined percentage share of the five largest destinations in a given year. HHI is calculated as the sum of squared destination market shares; higher values indicate greater concentration. These indicators are used descriptively and are not interpreted as causal estimates. An ordinary least-squares linear trend is also fitted to annual total arrivals as a descriptive benchmark. Because the series exhibits a structural disruption in 2020, the fitted trend is not used for forecasting. The purpose is only to summarise the direction and strength of the long-run association between year and recorded arrivals.

RESULTS AND DISCUSSION

Long-term trend in tourist arrivals

Tourist arrivals show a strong long-term upward trajectory, interrupted by several short-term declines and, most dramatically, by the 2020 contraction. The aggregate



Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on destination-wise tourist statistics for 2000-2023

Fig. 1 : Annual tourist arrivals across the 28 major destinations, 2000-2023

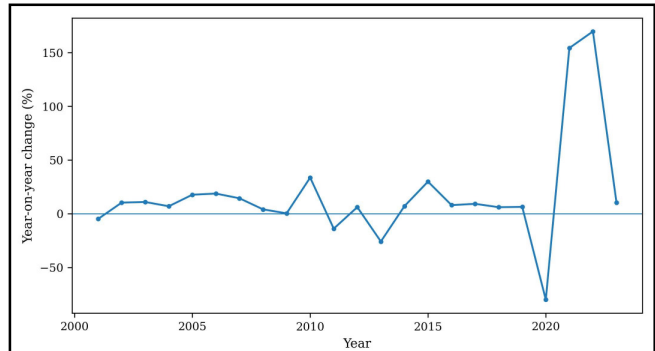
series increased from 11,135,580 arrivals in 2000 to 16,373,509 in 2005 and 31,108,593 in 2010. By 2015, arrivals had reached 29,406,246, and the pre-pandemic maximum in the supplied series was 39,225,740 in 2019. Thus, between 2000 and 2019, the number of recorded arrivals increased by 252.3%, equivalent to a CAGR of 6.85% (Fig. 1).

Annual fluctuations and turning points

The long-term trend is not monotonic. Arrivals declined from 11.14 million in 2000 to 10.60 million in 2001, before increasing to 16.37 million in 2005. The series then rose to 23.18 million in 2008 and 23.27 million in 2009. A marked increase occurred in 2010, when the aggregate reached 31.11 million. The following years show alternating expansion and contraction, including a decline to 21.13 million in 2013, followed by renewed growth to 39.23 million in 2019. The most pronounced structural break occurs between 2019 and 2020. Total arrivals decreased from 39,225,740 to 7,874,765, a decline of approximately 79.9%. The decline is visible across virtually all destinations in the supplied tables. Because the dataset itself does not record causal variables, the magnitude of the 2020 fall is described as a major disruption rather than being statistically attributed to a specific cause. Recovery after 2020 was rapid. Arrivals increased to 20,018,115 in 2021, 53,981,338 in 2022 and 59,636,601 in 2023. The 2020-2023 increase was 657.3%, reflecting the low pandemic-period base. More substantively, 2023 arrivals were 52.0% higher than the 2019 pre-pandemic level (Fig. 2 and Table 1).

Indian and foreign tourist composition

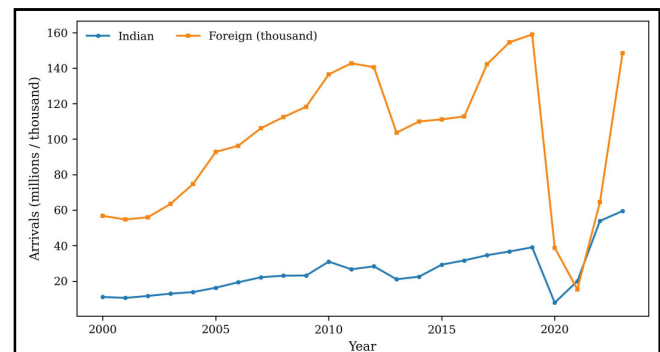
Indian tourists constitute the dominant component throughout the series. In 2000, Indian arrivals were 11,078,814 compared with 56,766 foreign arrivals. By



Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on the annual aggregate series derived from destination-level statistics

Fig. 2 : Year-on-year change in recorded tourist arrivals, 2001-2023

2019, Indian arrivals had increased to 39,066,776, while foreign arrivals reached 158,964. Indian arrivals, therefore, increased by approximately 252.6% between 2000 and 2019, whereas foreign arrivals increased by approximately 180.0%. The supplied 2021-2023 Table 1



Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on destination-wise tourist statistics for 2000-2023

Fig. 3 : Indian and foreign tourist arrivals, 2000-2023

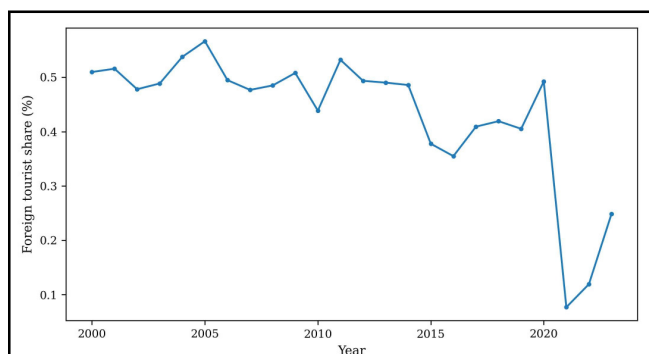
Table 1 : Selected annual indicators of tourist arrivals

Year	Indian	Foreigner	Total	Foreign share (%)	YoY (%)
2000	11,078,814	56,766	11,135,580	0.510	-
2005	16,280,765	92,744	16,373,509	0.566	17.8
2010	30,972,134	136,459	31,108,593	0.439	33.7
2015	29,295,152	111,094	29,406,246	0.378	29.9
2019	39,066,776	158,964	39,225,740	0.405	6.4
2020	7,836,002	38,763	7,874,765	0.492	-79.9
2021	20,002,705	15,410	20,018,115	0.077	154.2
2022	53,916,849	64,489	53,981,338	0.119	169.7
2023	59,488,189	148,412	59,636,601	0.249	10.5

Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on destination-level observations in the 2000-2020 and 2021-2023 tourist-statistics tables.

shows Indian arrivals of 20,002,705, 53,916,849 and 59,488,189, respectively, while foreign arrivals were 15,410, 64,489 and 148,412 (Fig. 3).

Despite their smaller absolute volume, foreign arrivals show an important post-pandemic recovery. The 2023 total of 148,412 was 6.6% below the 2019 total of 158,964. In contrast, total and Indian arrivals in 2023 exceeded their 2019 levels by more than 50%. This indicates that the recent expansion of the tourism system has been driven overwhelmingly by Indian/domestic arrivals, while the foreign segment was still recovering toward its earlier peak (Fig. 4).



Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on annual foreign and total arrivals derived from destination-level statistics

Fig. 4 : Foreign tourist share of recorded arrivals, 2000-2023

Destination-wise hierarchy

Destination-level results reveal a highly concentrated tourism structure. Haridwar is the leading destination in every selected benchmark year and remains substantially ahead of all other locations. In 2000, it recorded 5,324,639 arrivals; by 2019, it had reached 21,770,232; and in 2023, it recorded 37,071,502. The 2021-

2023 table independently reports Haridwar totals of 12,718,441, 34,259,407 and 37,071,502. In 2023, Haridwar alone accounted for 62.2% of all recorded arrivals. The top five destinations-Haridwar, Dehradun, Tehri, Kedarnath and Badrinath-together accounted for approximately 85.0% of the aggregate. The top-ten ranking is presented in Table 2 and Fig. 5.

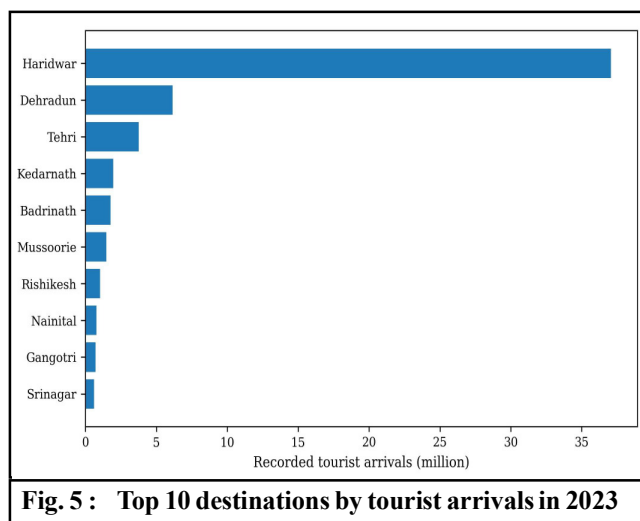


Fig. 5 : Top 10 destinations by tourist arrivals in 2023

Long-term destination growth

Long-term growth varies considerably among destinations. Small-base destinations such as Auli and the Valley of Flowers display very high percentage growth because their starting values were low. Auli increased from 8,730 arrivals in 2000 to 284,898 in 2019, while Valley of Flowers increased from 1,101 to 17,424. Among high-volume destinations, Dehradun, Tehri and Haridwar also show strong long-term expansion. Percentage growth should therefore be interpreted together with absolute visitor volume (Table 3 and Fig. 6).

Table 2 : Top-ten ranking Destination tourist inflow

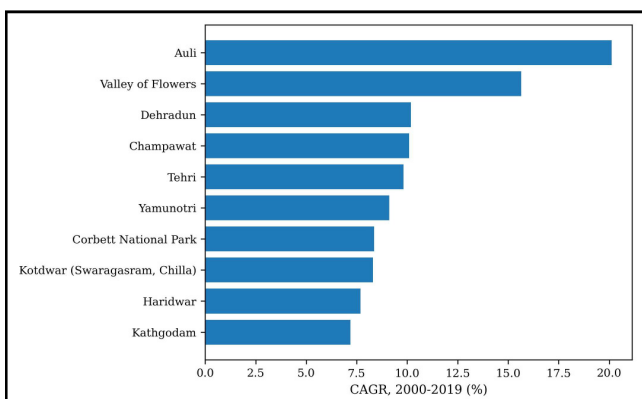
Rank	Destination	Indian	Foreigner	Total	Share (%)
1	Haridwar	37,050,845	20,657	37,071,502	62.16
2	Dehradun	6,113,424	26,262	6,139,686	10.30
3	Tehri	3,713,970	47,177	3,761,147	6.31
4	Kedarnath	1,957,609	1,254	1,958,863	3.28
5	Badrinath	1,779,930	499	1,780,429	2.99
6	Mussoorie	1,469,663	2,250	1,471,913	2.47
7	Rishikesh	1,038,891	3,993	1,042,884	1.75
8	Nainital	776,526	7,971	784,497	1.32
9	Gangotri	712,749	0	712,749	1.20
10	Srinagar	599,598	111	599,709	1.01

Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on destination-wise tourist statistics for 2000-2023.

Table 3 : Compound annual growth rate (CAGR) of selected destinations, 2000-2019

Destination	2000	2019	Growth (%)	CAGR (%)
Auli	8,730	284,898	3163.4	20.13
Valley of Flowers	1,101	17,424	1482.6	15.64
Dehradun	459,712	2,905,303	532.0	10.19
Champawat	33,901	210,713	521.6	10.09
Tehri	395,936	2,348,041	493.0	9.82
Yamunotri	88,672	465,534	425.0	9.12
Corbett National Park	61,501	283,281	360.6	8.37
Kotdwar (Swaragasram, Chilla)	99,317	452,466	355.6	8.31
Haridwar	5,324,639	21,770,232	308.9	7.69
Kathgodam	40,908	152,965	273.9	7.19

Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on destination totals reported in the 2000-2020 tourist-statistics tables.

**Fig. 6 : Compound annual growth rate (CAGR) of selected destinations, 2000-2019**

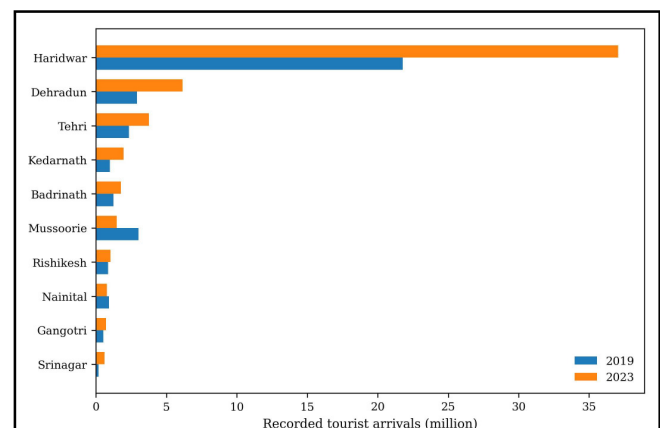
Pandemic-period contraction and post-pandemic recovery

The 2020 observation represents an exceptional discontinuity in the series. Total arrivals declined by 79.9% relative to 2019. Haridwar fell from 21,770,232 in 2019 to 4,021,831 in 2020, while Dehradun declined from 2,905,303 to 593,467. The supplied 2018-2020 table shows the broad contraction across the destination system.

Recovery was evident by 2021 and accelerated in 2022. Aggregate arrivals increased by 169.7% between 2021 and 2022 and by a further 10.5% in 2023. The moderation in growth between 2022 and 2023 is analytically important: it suggests that the exceptional rebound from the pandemic trough was transitioning toward a higher-volume operating level rather than continuing at the extraordinary rate observed immediately after reopening.

At the destination level, the recovery was uneven. In 2023, Haridwar recorded 37.07 million arrivals, followed by Dehradun at 6.14 million, Tehri at 3.76 million,

Kedarnath at 1.96 million and Badrinath at 1.78 million. The 2021-2023 source also records strong growth in destinations such as Srinagar, Dehradun, and Kedarnath over the 2019-2023 period, although the magnitude of growth varies substantially by destination (Fig. 7).



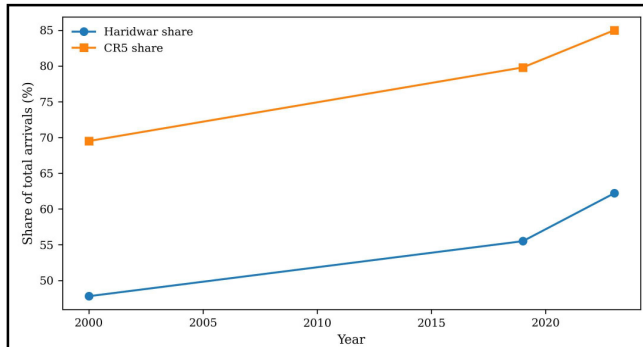
Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on destination-level statistics for 2019 and 2023.

Fig. 7 : Comparison of tourist arrivals in 2019 and 2023 for the leading destinations

Destination concentration

Concentration increased over the study period. Haridwar accounted for approximately 47.8% of the aggregate in 2000, 55.5% in 2019 and 62.2% in 2023. The combined share of the five largest destinations increased from about 69.5% in 2000 to 79.8% in 2019 and 85.0% in 2023. This pattern indicates that aggregate tourism growth has not been accompanied by proportional dispersion of visitors across all 28 destinations (Fig. 8).

High concentration can have two opposing implications. It can improve the efficiency of tourism



Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on the destination-level series and concentration measures reported in the study

Fig. 8 : Haridwar share and CR5 share of total recorded tourist arrivals, 2000-2023 benchmarks

services in established centres because demand is spatially clustered. At the same time, it can intensify pressure on

infrastructure and natural resources in those locations, while limiting the economic benefits to less-visited destinations. Consequently, destination diversification should focus not simply on increasing visitor numbers, but on developing complementary circuits, improving access and facilities, and matching visitation to ecological and infrastructural carrying capacity.

Advanced Statistical Results

The annual aggregate series has a coefficient of variation of 51.3%, indicating substantial inter-annual variability around the long-run mean. A simple linear trend fitted across 2000-2023 has an estimated slope of approximately 1,308,305 additional recorded arrivals per year and an R^2 of 0.506. Because the 2020 shock and the unusually rapid 2021-2023 rebound exert strong leverage on a simple linear trend, this statistic should be viewed as a descriptive indicator rather than evidence of a stable constant-rate growth process. Spatial

Table 4 : Destination recovery: 2019 versus 2023

Destination	2019 total	2023 total	Change (%)	Status
Srinagar	196,422	599,709	205.3	Above 2019
Dehradun	2,905,303	6,139,686	111.3	Above 2019
Kedarnath	1,000,021	1,958,863	95.9	Above 2019
Almora	128,674	238,611	85.4	Above 2019
Haridwar	21,770,232	37,071,502	70.3	Above 2019
Tehri	2,348,041	3,761,147	60.2	Above 2019
Udham Singh Nagar	163,140	250,909	53.8	Above 2019
Badrinath	1,244,993	1,780,429	43.0	Above 2019
Gangotri	530,334	712,749	34.4	Above 2019
Rishikesh	863,886	1,042,884	20.7	Above 2019
Yamunotri	465,534	560,918	20.5	Above 2019
Rudraprayag (without Kedarnath)	335,108	401,969	20.0	Above 2019
Corbett National Park	283,281	333,093	17.6	Above 2019
Kathgodam	152,965	173,096	13.2	Above 2019
Champawat	210,713	227,352	7.9	Above 2019
Joshimath (Govindghat, Ghanghariya)	489,520	515,373	5.3	Above 2019
Uttarkashi (Harshil, Gangnani, etc.)	381,940	363,439	-4.8	Below 2019
Nainital	933,906	784,497	-16.0	Below 2019
Ranikhet	152,584	125,167	-18.0	Below 2019
Kotdwar (Swaragasram, Chilla)	452,466	363,973	-19.6	Below 2019
Kausani & Bageshwar	105,360	82,563	-21.6	Below 2019
Valley of Flowers	17,424	13,232	-24.1	Below 2019
Gopeshwar (Nandprayag, Mundoli, Tharali, etc.)	255,320	176,139	-31.0	Below 2019
Hemkund Sahib	240,133	164,546	-31.5	Below 2019
Auli	284,898	181,681	-36.2	Below 2019
Pithoragarh	209,651	127,397	-39.2	Below 2019
Mussoorie	3,023,839	1,471,913	-51.3	Below 2019
Pauri	80,052	13,764	-82.8	Below 2019

Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on destination-level statistics for 2019 and 2023.

concentration increased markedly. The CR5 rose from 69.5% in 2000 to 79.8% in 2019 and 85.0% in 2023. The corresponding HHI increased from 2479 in 2000 to 3269 in 2019 and 4047 in 2023. This indicates that a stronger concentration of recorded arrivals in a small group of destinations has accompanied recent growth (Table 4).

Destination-level Recovery Assessment

A comparison of 2023 with the pre-pandemic benchmark of 2019 shows that 16 of the 28 destinations recorded higher total arrivals in 2023 than in 2019, while 12 recorded lower levels. This result is important because aggregate recovery can conceal heterogeneous destination outcomes. The 2023 total exceeded the 2019 statewide total, but recovery was not spatially uniform.

Garhwal-Kumaon Division-wise Comparison

The destination list can be organised into two broad geographical divisions of Uttarakhand: Garhwal and Kumaon. For the present comparative analysis, the 19 destinations supplied for the Garhwal division are Dehradun, Rishikesh, Mussoorie, Pauri, Srinagar, Kotdwar, Rudraprayag, Kedarnath, Gopeshwar, Joshimath, Badrinath, Auli, Hemkund Sahib, Valley of Flowers, Tehri, Uttarkashi, Gangotri, Yamunotri, and Haridwar. The nine destinations representing Kumaon are Almora, Ranikhet, Kausani-Bageshwar, Pithoragarh, Champawat, Nainital, Kathgodam, Corbett National Park and Udham Singh Nagar. Thus, the division-level comparison is constructed by aggregating the destination totals supplied in the source tables rather than by estimating an unreported division-level series.

Magnitude and Share of Tourism by Division

Garhwal dominated the aggregate tourism volume in each benchmark year. In 2000, Garhwal recorded

10,414,409 arrivals, compared with 721,171 in Kumaon, accounting for approximately 93.5% of the combined arrivals. By 2019, Garhwal had 36,885,466 arrivals and Kumaon 2,340,274, corresponding to shares of 94.0% and 6.0%, respectively. In 2023, Garhwal recorded 57,293,916 arrivals and Kumaon 2,342,685; Garhwal's share had increased further to 96.1%. From 2000 to 2019, Garhwal's recorded arrivals grew by 254.2%, while Kumaon's grew by 224.5%. The divergence widened after the pandemic: between 2019 and 2023, Garhwal grew by 55.3%, whereas Kumaon grew by 0.1 (Table 5)%.

Interpretation of the Division-wise Contrast

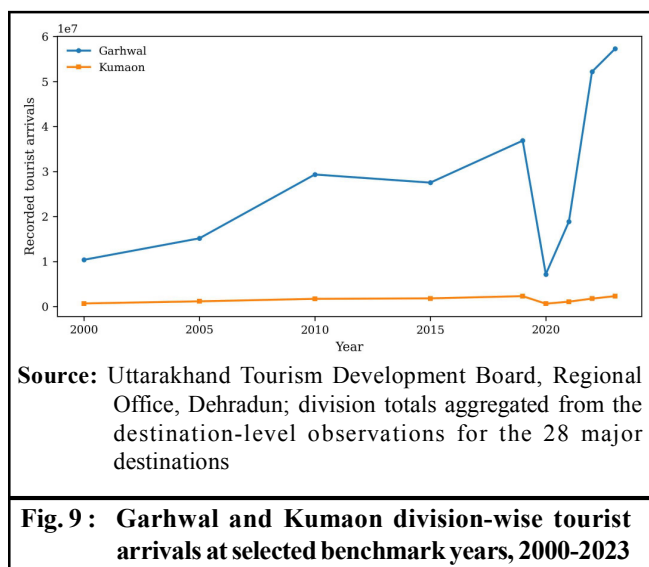
The division-wise pattern is strongly associated with the different tourism systems represented in the destination list. Garhwal contains the major Char Dham pilgrimage centres and several large pilgrimage, spiritual and mountain destinations, together with major gateways and urban centres. Kumaon contains a mixed portfolio of lake tourism, hill-station tourism, wildlife tourism, gateway functions and cultural destinations. The data show that the very high volumes at Haridwar, together with the large pilgrimage flows to Kedarnath and Badrinath and the substantial volumes recorded at Dehradun, Tehri and other Garhwal destinations, produce a much larger aggregate visitor base in Garhwal.

The contrast is not equivalent to saying that all Garhwal destinations are more visited than all Kumaon destinations. Nainital, for example, remains a major high-volume Kumaon destination, while Corbett National Park and other Kumaon locations contribute important nature and leisure tourism flows. The division-level result is therefore an aggregate structural difference derived from the combined volumes of destinations, rather than a simple ranking of individual destinations (Fig. 9).

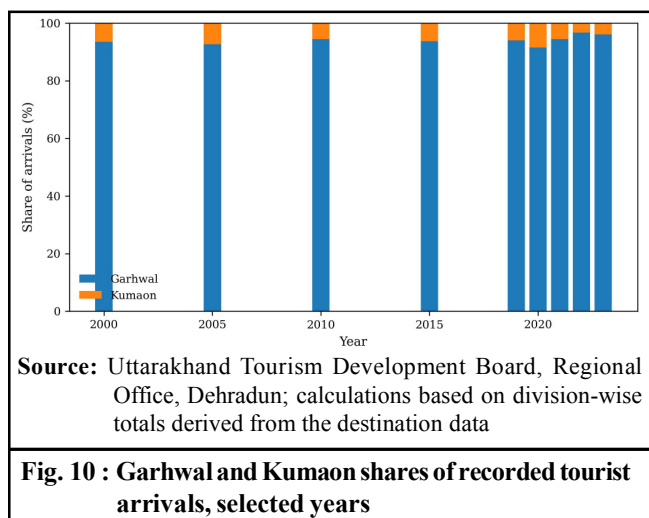
Table 5 : Garhwal-Kumaon comparison for selected years

Year	Garhwal	Kumaon	Garhwal share (%)	Kumaon share (%)	G: K ratio	Total
2000	10,414,409	721,171	93.5	6.5	14.44	11,135,580
2005	15,183,357	1,190,152	92.7	7.3	12.76	16,373,509
2010	29,363,561	1,745,032	94.4	5.6	16.83	31,108,593
2015	27,557,188	1,849,058	93.7	6.3	14.90	29,406,246
2019	36,885,466	2,340,274	94.0	6.0	15.76	39,225,740
2020	7,208,646	666,119	91.5	8.5	10.82	7,874,765
2021	18,899,697	1,118,418	94.4	5.6	16.90	20,018,115
2022	52,189,676	1,791,662	96.7	3.3	29.13	53,981,338
2023	57,293,916	2,342,685	96.1	3.9	24.46	59,636,601

Source: Uttarakhand Tourism Development Board, Regional Office, Dehradun; calculations based on data in both divisions



The post-pandemic comparison is particularly important. Garhwal's 2023 arrivals exceeded its 2019 level by a larger margin than Kumaon's, indicating a stronger aggregate recovery and expansion in the Garhwal tourism system. At the same time, a stronger Garhwal rebound also implies that infrastructure and carrying-capacity pressures may become more concentrated in already dominant pilgrimage and gateway destinations. This interpretation is consistent with previous research identifying carrying-capacity constraints in Himalayan pilgrimage circuits and with Uttarakhand's policy emphasis on decongesting mass-tourism hubs and creating satellite nodes (Fig. 10).



Source note: Data were obtained from Uttarakhand Tourism Development Board, Regional Office, Dehradun. All division totals are derived from the 28 destination

observations for 2000-2023; the source tables report destination-wise Indian, foreigner and total values rather than pre-aggregated Garhwal/Kumaon totals.

Structural characteristics of Uttarakhand tourism

The empirical pattern points to a multi-tier tourism hierarchy. At the top is Haridwar, whose very large volume distinguishes it from all other destinations. A second tier includes Dehradun, Mussoorie, Tehri, Badrinath, and Kedarnath, whose volumes are substantial but considerably smaller than those of Haridwar. A third tier contains destinations such as Rishikesh, Joshimath, Gangotri, Yamunotri, Corbett National Park, Nainital and related centres. The remaining destinations have smaller volumes but may possess considerable strategic importance due to pilgrimage, ecological, cultural, or gateway functions.

Domestic-tourism dominance

The overwhelming dominance of Indian arrivals is one of the clearest findings. This implies that policies designed to strengthen tourism resilience should prioritise domestic travel markets, pilgrimage flows, regional mobility, family and leisure tourism, and seasonal management. At the same time, foreign arrivals should not be ignored, as their smaller numbers may be associated with longer stays or different spatial and seasonal patterns; however, such interpretations cannot be quantified in the present dataset because expenditure, duration of stay, and visitor profiles are not provided.

Implications of concentration

The increasing share of the leading destinations raises a planning concern. A strategy based solely on increasing aggregate arrivals may intensify congestion in already-dominant centres. A more balanced approach would encourage geographically distributed tourism circuits linking established destinations with lower-volume locations. Transport connectivity, accommodation standards, sanitation, waste management, digital information systems, emergency services and destination-level visitor monitoring should support such diversification.

Resilience and recovery

The sharp 2020 fall, followed by a rapid recovery, demonstrates the sensitivity of tourism demand to systemic disruptions. The fact that 2023 arrivals exceeded the 2019 benchmark by 52.0% indicates that the sector

regained and expanded its aggregate volume. However, recovery should not be interpreted solely as a return to normality: the composition and spatial distribution of demand changed, with Indian arrivals driving most of the increase and concentration becoming more pronounced.

Conclusion

This study demonstrates a substantial increase in recorded tourism across the 28 major destinations in Uttarakhand between 2000 and 2023. Aggregate arrivals increased from 11,135,580 in 2000 to 39,225,740 in 2019, before falling to 7,874,765 in 2020. The subsequent recovery was rapid, reaching 59,636,601 in 2023-52.0% above the pre-pandemic 2019 benchmark. The long-term trend is therefore one of strong expansion interrupted by a severe but temporary contraction.

The tourism system is overwhelmingly domestic, with Indian arrivals accounting for the vast majority of total arrivals. Haridwar is the principal high-volume destination, and its share increased markedly over time. The concentration of visitors in a small group of destinations is a major structural feature: the five leading destinations

accounted for about 85% of all recorded arrivals in 2023. This finding suggests that future tourism policy should move beyond aggregate growth targets toward destination diversification, carrying capacity management, and resilient infrastructure.

The 2021-2023 recovery demonstrates strong demand, but the post-pandemic pattern should be managed carefully. The challenge for Uttarakhand is not simply to accommodate more visitors; it is to distribute tourism benefits while protecting environmentally sensitive landscapes and maintaining the quality and safety of visitor experiences. A long-term destination management framework integrating tourism statistics, infrastructure capacity, environmental sensitivity and local economic indicators would provide a stronger basis for sustainable tourism planning.

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Appendix A				
Year	Indian	Foreigner	Total	Foreign share (%)
2000	11,078,814	56,766	11,135,580	0.510
2001	10,548,784	54,701	10,603,485	0.516
2002	11,652,018	55,974	11,707,992	0.478
2003	12,929,593	63,499	12,993,092	0.489
2004	13,830,045	74,761	13,904,806	0.538
2005	16,280,765	92,744	16,373,509	0.566
2006	19,358,453	96,264	19,454,717	0.495
2007	22,154,250	106,150	22,260,400	0.477
2008	23,064,170	112,423	23,176,593	0.485
2009	23,154,214	118,243	23,272,457	0.508
2010	30,972,134	136,459	31,108,593	0.439
2011	26,665,753	142,687	26,808,440	0.532
2012	28,329,686	140,524	28,470,210	0.494
2013	21,028,010	103,596	21,131,606	0.490
2014	22,520,097	109,948	22,630,045	0.486
2015	29,295,152	111,094	29,406,246	0.378
2016	31,663,782	112,799	31,776,581	0.355
2017	34,581,097	142,102	34,723,199	0.409
2018	36,697,678	154,526	36,852,204	0.419
2019	39,066,776	158,964	39,225,740	0.405
2020	7,836,002	38,763	7,874,765	0.492
2021	20,002,705	15,410	20,018,115	0.077
2022	53,916,849	64,489	53,981,338	0.119
2023	59,488,189	148,412	59,636,601	0.249

Appendix B				
Rank	Destination	Indian	Foreigner	Total
1	Haridwar	37,050,845	20,657	37,071,502
2	Dehradun	6,113,424	26,262	6,139,686
3	Tehri	3,713,970	47,177	3,761,147
4	Kedarnath	1,957,609	1,254	1,958,863
5	Badrinath	1,779,930	499	1,780,429
6	Mussoorie	1,469,663	2,250	1,471,913
7	Rishikesh	1,038,891	3,993	1,042,884
8	Nainital	776,526	7,971	784,497
9	Gangotri	712,749	0	712,749
10	Srinagar	599,598	111	599,709
11	Yamunotri	560,918	0	560,918
12	Joshimath (Govindghat, Ghanghariya)	514,340	1,033	515,373
13	Rudraprayag (without Kedarnath)	401,618	351	401,969
14	Kotdwar (Swaragasram, Chilla)	342,156	21,817	363,973
15	Uttarkashi (Harshil, Gangnani, etc.)	362,106	1,333	363,439
16	Corbett National Park	328,372	4,721	333,093
17	Udham Singh Nagar	249,689	1,220	250,909
18	Almora	235,571	3,040	238,611
19	Champawat	227,129	223	227,352
20	Auli	181,353	328	181,681
21	Gopeshwar (Nandprayag, Mundoli, Tharali, etc.)	173,833	2,306	176,139
22	Kathgodam	172,741	355	173,096
23	Hemkund Sahib	164,501	45	164,546
24	Pithoragarh	126,989	408	127,397
25	Ranikhet	125,167	0	125,167
26	Kausani and Bageshwar	81,935	628	82,563
27	Pauri	13,735	29	13,764
28	Valley of Flowers	12,831	401	13,232

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