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Cultural Tourism–Green Economy Nexus In India: Exploring Pathways For Sustainable And Inclusive Economic Growth

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Abstract

Cultural tourism links India's heritage, living traditions and crafts to the fastest-moving part of its service economy, while the country's green transition is reshaping how tourism infrastructure is powered, built and governed. This paper examines the nexus between the two using official data up to 2024. International tourist arrivals reached 205.69 lakh in 2024 (14.8% above 2019), foreign exchange earnings reached ₹2,93,033 crore (35.4% above 2019), and domestic tourist visits touched 2,948.19 million (27.0% above 2019). Earnings per international arrival rose from about ₹1.21 lakh to ₹1.42 lakh, indicating a shift from volume to value, although the yield gain flattened in 2024. Tourism accounted for 5.22% of GDP and an estimated 84.63 million jobs in 2023-24. Yet benefits are spatially concentrated: five states captured 64.2% of foreign tourist visits in 2024 and the eight North-Eastern states only 1.17% (Gini = 0.74 across 36 states and UTs). With renewable capacity at 209.44 GW and the Swadesh Darshan 2.0 scheme embedding sustainability criteria, the policy preconditions for a green cultural-tourism model exist. Drawing on this evidence, the paper proposes five pathways—green heritage infrastructure, community and artisan value chains, regional dispersal, digital carrying-capacity management, and green finance with skilling and a monitoring dashboard to track sustainable and inclusive outcomes.

Keywords: cultural tourism; green economy; inclusive growth; sustainable tourism; heritage; India; Swadesh Darshan

1. INTRODUCTION

Tourism is one of the few sectors in which a country's cultural capital is converted directly into foreign exchange, employment and local incomes. India holds an unusually rich stock of such capital: 43 UNESCO World Heritage Sites, 15 elements on the Representative List of Intangible Cultural Heritage, eight UNESCO Creative Cities, thousands of protected monuments, living pilgrimage systems, and a craft economy embedded in village and urban clusters (UNESCO, 2024). At the same time, India has committed to 500 GW of non-fossil power capacity by 2030 and net-zero emissions by 2070, which makes the decarbonisation of service sectors such as tourism an explicit part of the national development agenda. These two agendas are usually studied separately. Cultural tourism research tends to focus on visitor motivations, heritage management or economic impact, whereas green-economy research concentrates on energy, industry and agriculture. Yet the two meet on the ground at every heritage precinct, pilgrimage town and craft village: a temple corridor needs clean energy, waste systems and water management; a heritage-walk economy depends on artisans, guides and homestay hosts; and the long-run value of both depends on the integrity of the asset being visited. Global evidence also warns that tourism is carbon-intensive; Lenzen et al. (2018) estimate that tourism accounts for roughly 8% of global greenhouse-gas emissions, largely through transport, which means growth that ignores environmental limits can erode the very basis of the industry.India's post-pandemic recovery makes the question timely. Domestic tourism has surpassed pre-pandemic levels by a wide margin, foreign exchange earnings have crossed ₹2.9 lakh crore, and government schemes have been redesigned around "sustainable and responsible" destinations. At the same time, international arrivals have only just recovered, and the spatial spread of benefits remains narrow. This paper therefore asks four questions:

- **RQ1.** How has the scale and value of tourism in India recovered between 2019 and 2024, and what does this imply for cultural tourism as a growth engine?
- **RQ2.** How inclusive is the distribution of tourism benefits across states, source markets and regions?

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- **RQ3.** Does India's green-economy and policy architecture provide the conditions for a low-carbon cultural tourism model?
- **RQ4.** Which pathways can align cultural tourism with sustainable and inclusive growth, and how can progress be monitored?

The paper contributes in three ways. First, it assembles a consistent 2019–2024 evidence base from official sources. Second, it introduces simple indicators of value (earnings per arrival) and inclusion (concentration and regional shares) that are computed from published data. Third, it translates the evidence into a pathway framework and a monitoring dashboard that policymakers can adopt without waiting for new data systems.

2. CONCEPTUAL FRAMEWORK AND LITERATURE

2.1 Cultural tourism and economic growth

Cultural tourism covers travel motivated by heritage, arts, religious and spiritual traditions, festivals, cuisine and everyday ways of life (Richards, 2018). Throsby (2001) frames heritage as cultural capital that yields both economic value, such as ticket revenue and spending, and cultural value, such as identity and meaning; sustaining this capital requires reinvestment. The tourism-led growth literature, beginning with Balaguer and Cantavella-Jordá (2002), argues that international tourism can raise growth through foreign exchange, scale effects and spillovers to related industries. Evidence is context-specific, however, and depends on how well tourism is linked to the domestic economy.

2.2 Green economy and sustainable tourism

UNEP (2011) defines a green economy as one that improves human well-being and social equity while significantly reducing environmental risks and ecological scarcities. For tourism, this translates into energy and water efficiency, renewable energy use, waste reduction, low-carbon mobility and protection of natural and cultural assets (UNWTO & UNEP, 2005). Sharpley (2000) cautions that sustainable development and tourism growth do not automatically coincide, since the destination life-cycle can move towards congestion and decline when carrying capacity is exceeded (Butler, 1980). The triple-bottom-line view (Elkington, 1997) is a useful organising device because it requires economic, social and environmental performance to be judged together.

2.3 Inclusive growth and community benefit

Inclusive growth requires that expansion in output is accompanied by broad participation and equitable distribution of opportunities (Ali & Zhuang, 2007). Pro-poor tourism research stresses that the poor benefit when tourism is deliberately linked to local suppliers, artisans, guides and small enterprises (Ashley, Roe & Goodwin, 2001), and that community empowerment, rather than mere employment, determines long-term outcomes (Scheyvens, 1999). Cultural tourism is especially suited to this logic because its inputs crafts, performing arts, food, guiding, homestays are labour-intensive and locally rooted.

2.4 The nexus framework

Figure 1 synthesises these strands. Cultural assets generate tourism demand; demand generates revenue, jobs and pressure on resources; the green economy supplies the clean energy, circular systems and nature-based solutions that determine how much of that pressure is avoided. The nexus is therefore two-directional: tourism finances heritage conservation and green investment, while green infrastructure protects the heritage that attracts tourists. Outcomes are judged on three dimensions: growth, inclusion and sustainability.

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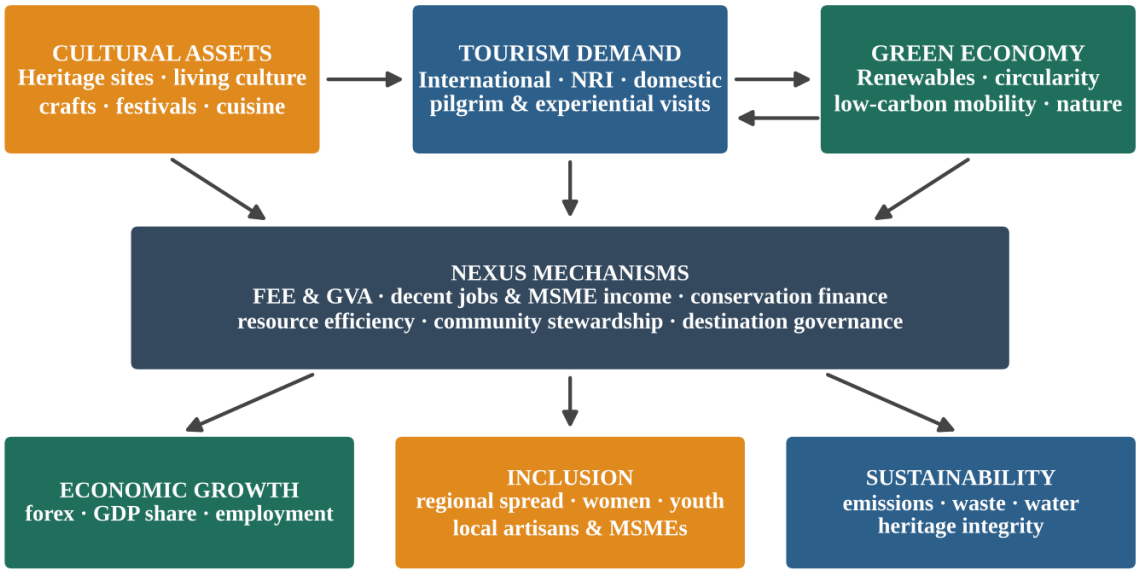


Figure 1. Cultural Tourism–Green Economy nexus: conceptual framework
Source: Authors' framework, adapted from UNEP (2011), UNWTO & UNEP (2005) and Throsby (2001).

2.5 Research gap

Three gaps motivate this study. First, much of the literature treats tourism-led growth, environmental sustainability and inclusion as separate questions, whereas policy in India increasingly bundles them in a single destination-development agenda. Second, official Indian statistics describe flows and earnings in detail but do not identify cultural tourists, emissions or local-sourcing shares, so integrated assessment is rare. Third, post-pandemic data from 2022 to 2024 have only recently become available, and they show a recovery whose character, whether driven by volume or by value, has direct environmental consequences. By combining the latest official data with simple decomposition and concentration measures, the paper offers an evidence-based entry point for this integrated discussion.

3. DATA AND METHODOLOGY

The study uses a descriptive-analytical design based entirely on secondary data published by government bodies, with the reference period ending in 2024 (calendar year for tourist flows and earnings, financial year for GDP and jobs). Table 1 lists the variables and sources. India does not publish a separate cultural-tourism account or a national series on tourism emissions; the paper therefore uses aggregate tourism indicators as proxies and treats the cultural dimension qualitatively, through heritage assets, thematic schemes and state-level patterns.

Table 1. Variables, definitions and sources

Variable	Definition / unit	Period	Source
International tourist arrivals (ITAs)	Foreign tourist arrivals plus arrivals of non-resident Indians; lakh	2019–2024	Bureau of Immigration; Ministry of Tourism (PIB, 8 Dec 2025)
Foreign exchange earnings (FEE)	Tourism receipts; ₹ crore (revised estimates for 2024)	2019–2024	Reserve Bank of India; Ministry of Tourism
Domestic tourist visits (DTVs)	Visits to states/UTs; million	2019–2024	State/UT tourism departments; Ministry of Tourism
Foreign tourist visits (FTVs)	State-wise foreign tourist visits; counts	2024	Ministry of Tourism, Annexure-I (8 Dec 2025)

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Variable	Definition / unit	Period	Source
Tourism share in GDP and jobs	Tourism Satellite Account (TSA) ratios; % and million	2018-19 to 2023-24	Ministry of Tourism; PLFS-based estimates
Renewable and non-fossil capacity	Installed capacity; GW	2014–2024	Ministry of New and Renewable Energy (MNRE)
Scheme sanctions	Projects and sanctioned cost; ₹ crore	To early 2025	Ministry of Tourism replies in Parliament

Note: 2023-24 TSA figures are provisional. State-wise FTVs count visits to each state, so one tourist visiting several states is counted more than once.

Four analytical steps are used. (i) Growth and recovery are measured by year-on-year change, compound annual growth rate (CAGR) and an index with 2019 = 100. (ii) Value is measured by earnings per international arrival (FEE divided by ITAs). (iii) Inclusion is measured by the shares of the leading states, a Herfindahl–Hirschman Index (HHI), a Gini coefficient across 36 states and UTs, and the share of the North-Eastern region. (iv) The nexus is explored through correlations and a simple regression of FEE on arrivals. With only six annual observations dominated by the pandemic shock, the regression is indicative and is not interpreted causally. The main formulas are as follows, where X denotes arrivals, earnings or visits, s_i is the share of state i in national foreign tourist visits, and n = 36:

$CAGR = (X_{2024} / X_{2019})^{(1/5)} - 1$; $Yield_t = FEE_t / ITA_t$; $HHI = \Sigma s_i^2 \times 10{,}000$

$Gini = [2 \Sigma i \cdot x_i / (n \Sigma x_i)] - (n + 1)/n$ (x sorted ascending); $\Delta \ln FEE = \Delta \ln ITA + \Delta \ln Yield$

4. TOURISM DEMAND, RECOVERY AND VALUE, 2019–2024

4.1 Scale and recovery

Table 2 and Figures 2 and 3 show the collapse and recovery of tourism flows. International arrivals fell by 64.6% in 2020 and bottomed out at 63.37 lakh before recovering to 205.69 lakh in 2024. Foreign tourist arrivals alone, which exclude non-resident Indians, were 99.52 lakh in 2024, still below the 109.3 lakh recorded in 2019 (Ministry of Tourism, 2025b). The gap is closed by non-resident Indian arrivals, which—derived as ITAs minus FTAs—stood at about 106 lakh, or 51.6% of all international arrivals. Diaspora travel, much of it tied to family, festivals and heritage, is therefore now the largest single block of inbound demand.

Table 2. Key tourism indicators, India, 2019–2024

Year	ITAs (lakh)	FEE (₹ crore)	FEE per ITA (₹)	DTVs (million)	FTVs (million)
2019	179.14	2,16,467	1,20,837	2,321.98	–
2020	63.37	95,738	1,51,078	610.22	7.17
2021	70.10	63,978	91,267	677.63	1.05
2022	143.30	1,69,917	1,18,574	1,731.01	8.59
2023	188.99	2,66,045	1,40,772	2,508.82	19.24
2024	205.69	2,93,033	1,42,463	2,948.19	20.94

Source: Ministry of Tourism (PIB release 2200323, 8 Dec 2025; Rajya Sabha USQ 1412, 11 Dec 2025); Dataful/Ministry of Tourism for FTVs. FEE per ITA is computed by the authors. The 2020 value reflects a collapsing denominator and is not comparable.

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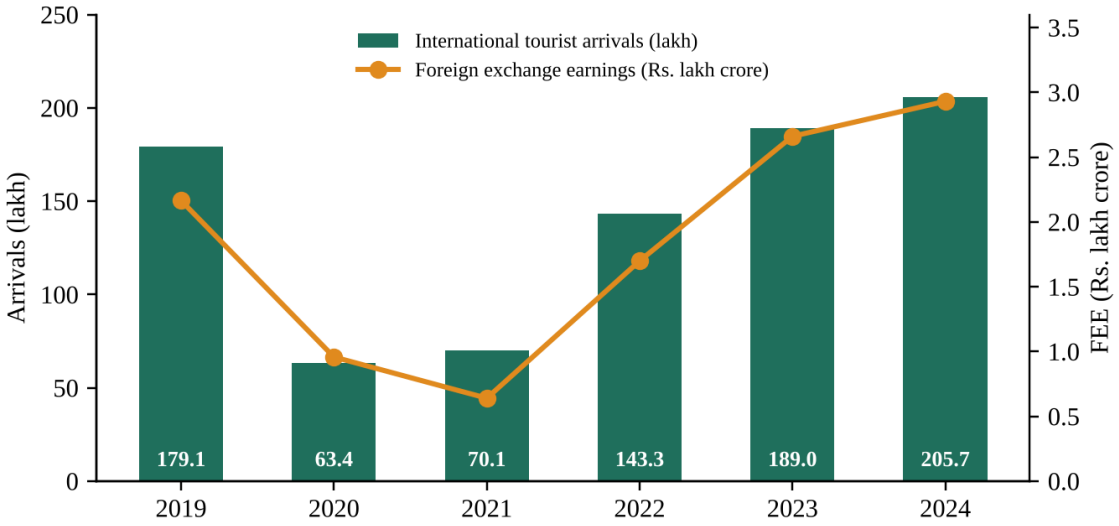


Figure 2. International tourist arrivals and foreign exchange earnings, 2019–2024
Source: Ministry of Tourism; Bureau of Immigration; RBI. Authors' plot.

Domestic tourism recovered faster and further. Domestic visits rose from 610.22 million in 2020 to 2,948.19 million in 2024, a 17.5% increase over 2023 and 27.0% above 2019. The 2024 surge was strongly shaped by pilgrimage and cultural destinations: Uttar Pradesh recorded 646.81 million visits (+35.17%), followed by Tamil Nadu (306.84 million) and Karnataka (304.6 million) (Ministry of Tourism, 2025a). Cultural and spiritual circuits are thus the backbone of domestic demand, which makes their environmental management a first-order issue rather than a niche concern.

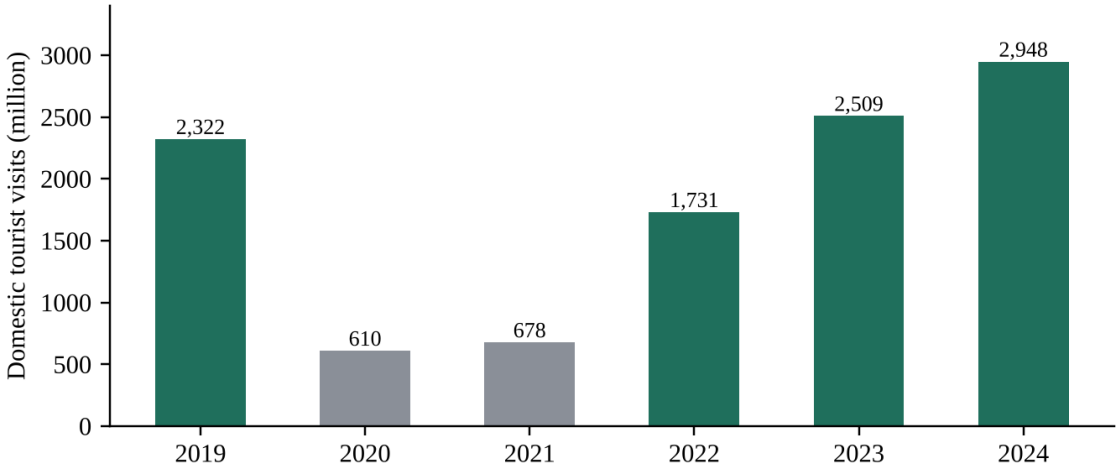


Figure 3. Domestic tourist visits, 2019–2024 (pandemic years shaded grey)
Source: Ministry of Tourism; 2023 figure as revised in the India Tourism Data Compendium 2025.

4.2 From volume to value

The central message of Table 3 is that earnings recovered faster than arrivals. By 2024, arrivals stood at 114.8% of their 2019 level, whereas earnings stood at 135.4% and domestic visits at 127.0% (Figure 4). Earnings per international arrival rose from ₹1,20,837 to ₹1,42,463, an increase of 17.9%. In US dollar terms, earnings were US$35.016 billion in 2024, 8.78% above US$32.189 billion in 2023, about 2.02% of global tourism receipts (Ministry of Tourism, 2025a). Part of this gain reflects nominal price effects and exchange-rate movements, so it should not be read as a pure increase in real spending per visitor; even so, the direction supports a value-led rather than volume-led strategy, which is the one most compatible with environmental limits. Section 8.2 shows, however, that most of the yield gain had been achieved by 2023 and flattened in 2024.

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Table 3. Growth, recovery and association statistics

Measure	ITAs	FEE	DTVs
CAGR, 2019–2024 (%)	2.80	6.24	4.89
2024 level as % of 2019	114.8	135.4	127.0
Growth in 2022 over 2021 (%)	104.4	165.6	155.5
Growth in 2023 over 2022 (%)	31.9	56.6	44.9
Growth in 2024 over 2023 (%)	8.8	10.1	17.5
Correlation with ITAs (r)	1.000	0.975	0.996
Correlation with FEE (r)	0.975	1.000	0.984

Source: Authors' calculations from Table 2 (n = 6).

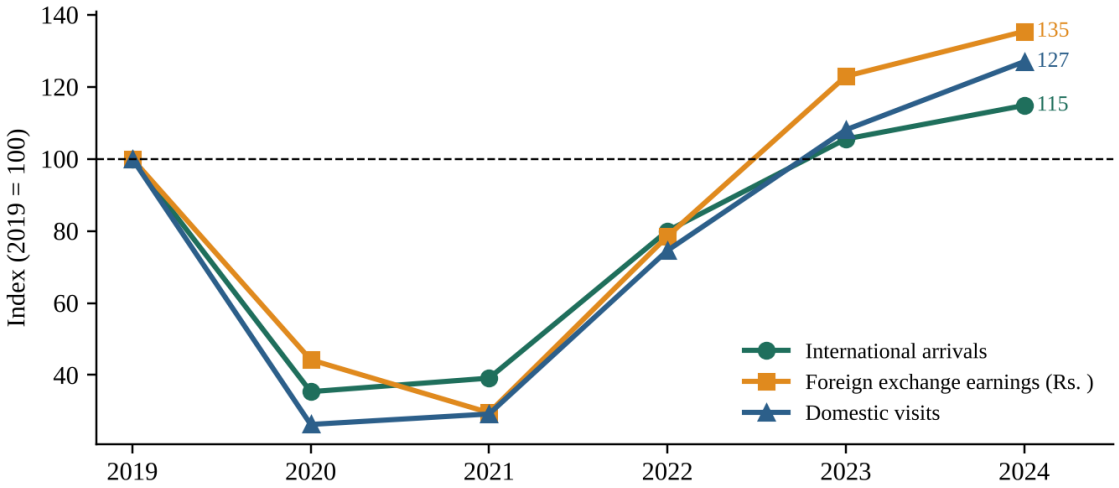


Figure 4. Recovery index of tourism indicators (2019 = 100)
Source: Authors' calculations from Ministry of Tourism data.

5. ECONOMIC CONTRIBUTION: GDP, EMPLOYMENT AND FOREIGN EXCHANGE

The Tourism Satellite Account (TSA) provides the most reliable view of tourism's weight in the economy. Tourism contributed 5.01% of GDP in 2018-19 and 5.18% in 2019-20, fell to 1.50% in the pandemic year 2020-21 and recovered to 5.00% in 2022-23, with direct and indirect components of 2.60% and 2.40% respectively; the provisional share for 2023-24 is 5.22% (Ministry of Tourism, 2024; 2025c). Tourism-related employment, estimated from the Periodic Labour Force Survey, was 69.44 million in 2019-20, dipped to 68.07 million in 2020-21 and reached 84.63 million in 2023-24, equal to roughly 13.3% of total employment (Table 4, Figure 5). Employment in 2023-24 was therefore 21.9% above its 2019-20 level and 11.1% above 2022-23.

Table 4. Tourism share in GDP and employment

Financial year	Share in GDP (%)	Direct (%)	Indirect (%)	Tourism jobs (million)
2018-19	5.01	2.61	2.40	–
2019-20	5.18	2.69	2.49	69.44
2020-21	1.50	0.78	0.72	68.07
2021-22	1.75	0.91	0.84	70.04

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Financial year	Share in GDP (%)	Direct (%)	Indirect (%)	Tourism jobs (million)
2022-23	5.00	2.60	2.40	76.17
2023-24 (P)	5.22	–	–	84.63

Source: Ministry of Tourism (PIB, 25 Nov 2024; Lok Sabha USQ 222; Rajya Sabha reply, 31 Jul 2025; PIB release 2200323). (P) = provisional; jobs include direct and indirect employment.

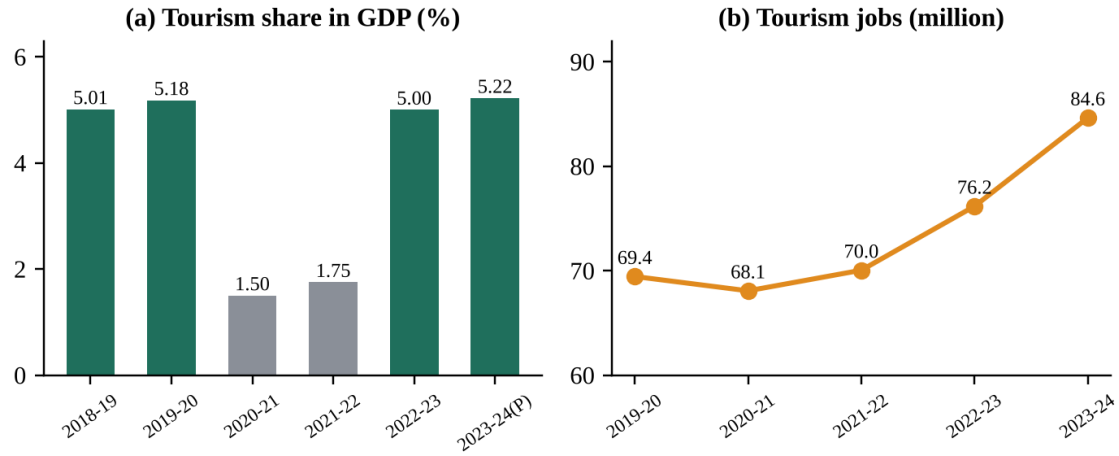


Figure 5. Tourism share in GDP and tourism employment
Source: Ministry of Tourism, Third Tourism Satellite Account (2015-16) updates and PLFS-based estimates.

Two features matter for the nexus. First, employment grew faster than the share in GDP between 2022-23 and 2023-24, which suggests that tourism remains labour-absorbing, a favourable property for inclusion. Second, the sector's dependence on transport, accommodation and food services means that a large part of its resource footprint sits in energy use, mobility and waste, precisely the areas where green investment can generate the largest gains.

6. WHO BENEFITS? SPATIAL AND MARKET CONCENTRATION

Table 5 and Figure 6 show that foreign tourist visits are heavily concentrated. In 2024, Maharashtra, West Bengal, Gujarat, Uttar Pradesh and Rajasthan together accounted for 64.2% of the 209.4 lakh foreign tourist visits recorded across states and UTs; adding Delhi raises the share to 73.8%. The HHI is about 1,037 and the Gini coefficient across 36 states and UTs is 0.74, indicating high inequality. The eight North-Eastern states together recorded only 2.44 lakh visits, or 1.17% of the total, despite their rich cultural traditions and ecological assets. Total FTVs are about 2.1 times FTAs, which indicates that visitors on average visit more than two states, an opportunity for itinerary design.

Table 5. State-wise foreign tourist visits, 2024: leading states and North-East

State / region	FTVs, 2024	Share (%)	Change over 2023 (%)
Maharashtra	37,05,170	17.7	+9.4
West Bengal	31,24,462	14.9	+15.4
Gujarat	22,74,477	10.9	−19.0
Uttar Pradesh	22,69,067	10.8	+41.7
Rajasthan	20,72,407	9.9	+21.9
Delhi	19,99,410	9.5	+9.4
Tamil Nadu	11,61,302	5.5	−1.2
Kerala	7,38,374	3.5	+13.8
Bihar	7,36,720	3.5	+34.8

State / region	FTVs, 2024	Share (%)	Change over 2023 (%)
Eight North-Eastern states*	2,44,158	1.17	n/a
All states and UTs	2,09,42,074	100.0	–

Source: Ministry of Tourism, Annexure-I (PIB release 2200323). Shares and changes computed by the authors.
*Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

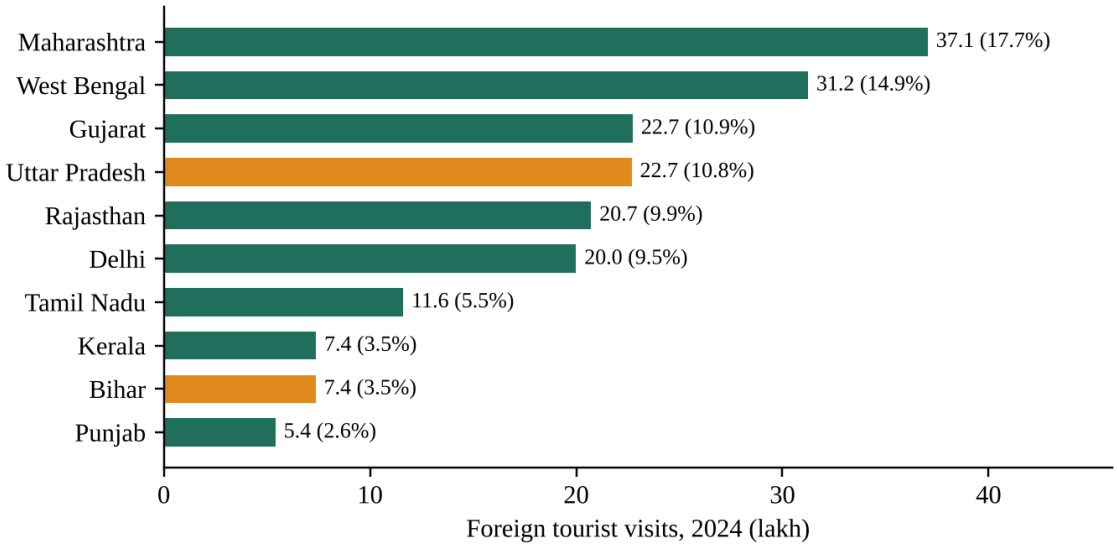


Figure 6. Top ten states by foreign tourist visits, 2024 (highlighted: states linked to the Buddhist and temple corridors)

Source: Ministry of Tourism. Authors' plot. Values in lakh, with share of all-India visits in brackets.

Growth patterns in Table 5 are revealing. Uttar Pradesh (+41.7%) and Bihar (+34.8%) grew fastest, which is consistent with the pull of the temple and Buddhist heritage corridors that the government has prioritised, and Rajasthan's heritage circuit grew by 21.9%. Gujarat's fall of 19.0% from an unusually high 2023 base is a reminder of how event-driven demand can be volatile. For equity, the policy issue is not that leading states are successful but that the gains remain geographically narrow; the North-East's 1.17% share suggests substantial room for dispersal, provided connectivity and carrying capacity are managed.

6.1 A typology of state experiences

Grouping states by their position and momentum clarifies where different policy emphases are needed (Table 6). The five established hubs hold 62.9% of foreign visits but grew only 6.0% in 2024, so their priority is managing intensity and diverting visitors to nearby secondary sites. Uttar Pradesh and Bihar, together 14.4% of visits, grew by 39.9%, which means that waste, water and mobility systems must be planned ahead of demand. The southern states combine heritage, coast and nature and already host community-linked experiments in responsible tourism. The North-East grew by a respectable 10.4% but from a very small base.

Table 6. Typology of states by foreign tourist visits, 2024

Group	States	Share, 2024 (%)	Change 2023–24 (%)	Policy emphasis
A. Established hubs	Maharashtra, West Bengal, Gujarat, Rajasthan, Delhi	62.9	+6	Carrying-capacity management; green retrofits; dispersal to secondary sites
B. Fast-rising corridors	Uttar Pradesh, Bihar	14.4	+39.9	Waste, water and mobility planning ahead of demand; community participation

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Group	States	Share, 2024 (%)	Change 2023–24 (%)	Policy emphasis
C. Southern heritage and nature	Tamil Nadu, Kerala, Karnataka, Goa	13.6	+6.2	Scaling responsible-tourism models; coastal and temple-town sustainability
D. North-East	Eight North-Eastern states	1.2	+10.4	Connectivity, homestays, eco-cultural circuits with visitor caps

Source: Authors' calculations from Ministry of Tourism, Annexure-I (PIB release 2200323). The grouping is the authors' own and excludes other states and UTs, which hold the remaining share.

Source markets show a similar concentration. The United States (18.05 lakh), Bangladesh (17.50 lakh), the United Kingdom (10.23 lakh), Australia (5.18 lakh) and Canada (4.76 lakh) supplied about 56% of foreign tourist arrivals in 2024, and the ten leading markets about 69% (Figure 7). Four Anglophone markets with large diaspora populations account for 38.4% of arrivals, which suggests, as an interpretation rather than a measured fact, that heritage and family-linked travel is a significant driver; Bangladesh's large share also points to cross-border cultural, family and medical travel into West Bengal. Both patterns imply that targeted marketing of lesser-known cultural circuits to these existing markets could be an efficient route to diversification.

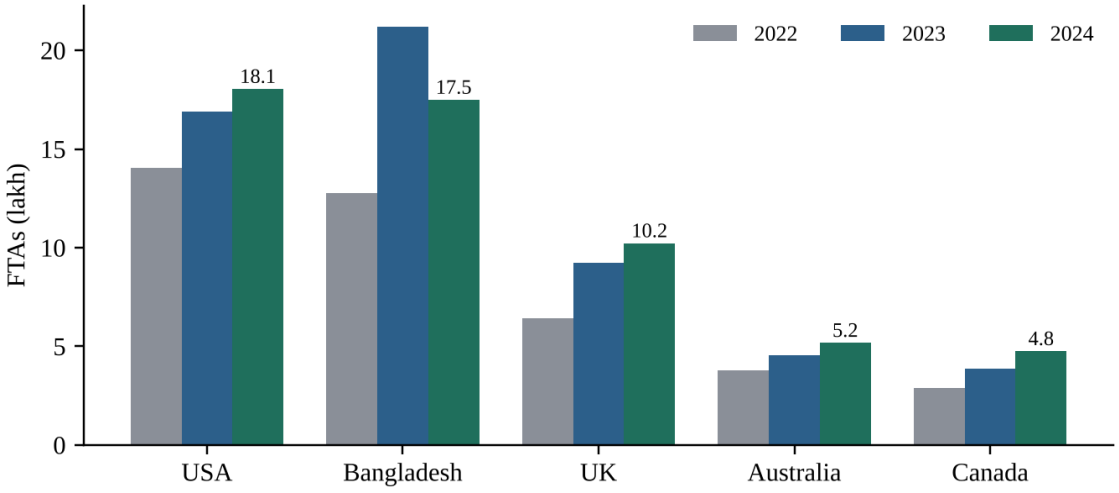


Figure 7. Leading source markets for foreign tourist arrivals, 2022–2024
Source: Bureau of Immigration, Ministry of Tourism (PIB release 2200323). Authors' plot.

7. GREEN-ECONOMY CONTEXT AND POLICY ARCHITECTURE

7.1 Energy transition

India's energy system is changing quickly, which lowers the cost of decarbonising tourism infrastructure. Installed renewable capacity (including large hydro) rose 15.84% from 180.80 GW in December 2023 to 209.44 GW in December 2024, and calendar-year additions of about 28.6 GW were more than double those of 2023. Solar capacity reached 97.86 GW after a record 24.54 GW addition, and wind reached 48.16 GW. Including large hydro and nuclear, non-fossil capacity stood at 217.62 GW, 47.24% of the 460.68 GW total installed capacity (MNRE, 2025). Table 7 summarises the indicators.

Table 7. Selected green-economy and cultural-asset indicators

Indicator	Value	Reference
Renewable capacity incl. large hydro	180.80 GW (Dec 2023) → 209.44 GW (Dec 2024)	MNRE
Solar / wind capacity, Dec 2024	97.86 GW / 48.16 GW	MNRE
Solar addition in 2024	24.54 GW (about 10 GW in 2023)	MNRE
Non-fossil capacity, 31 Dec 2024	217.62 GW (47.24% of total installed capacity)	MNRE
National targets	500 GW non-fossil by 2030; net-zero by 2070	Government of India
UNESCO World Heritage Sites	43 (35 cultural, 7 natural, 1 mixed)	UNESCO, 2024
Intangible heritage elements / Creative Cities	15 / 8	UNESCO

Source: MNRE year-end review 2024 and press releases; UNESCO. Compiled by the authors.

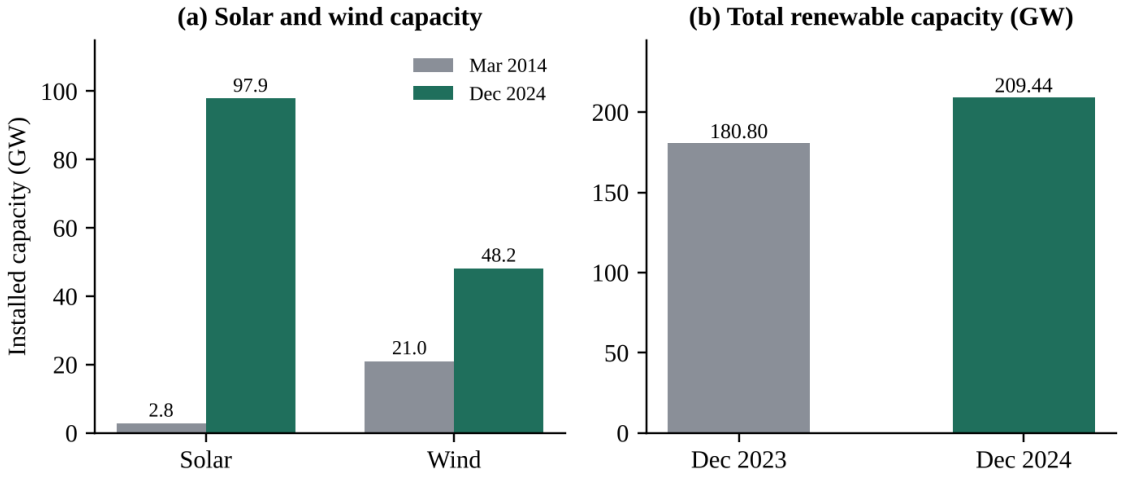


Figure 8. Renewable energy capacity: solar, wind and total (GW)

Source: MNRE. Authors' plot.

The energy transition matters for tourism in specific ways. Heritage hotels, temple complexes, museums, ropeways and visitor centres are intensive electricity users and, in many cases, are located in places with good solar potential. Falling renewable costs and rooftop solar programmes make it feasible to power such facilities from clean sources, while electrified public transport and shared mobility in heritage cities can lower the largest source of tourism emissions, which is transport (Lenzen et al., 2018).

7.2 The policy architecture for sustainable cultural tourism

The Ministry of Tourism has moved from asset-led to destination-led and sustainability-led schemes. Swadesh Darshan, launched in 2014-15 for thematic circuits, sanctioned 76 projects worth ₹5,287.90 crore, of which 75 were reported physically complete. It was revamped as Swadesh Darshan 2.0 (SD2.0) "to develop sustainable and responsible tourism destinations"; its guidelines emphasise renewable energy, eco-friendly materials, accessible infrastructure, capacity building and local entrepreneurship, and by early 2025 it had identified 58 destinations and sanctioned 34 projects worth ₹793.20 crore. A Challenge-Based Destination Development sub-scheme rewards destination-level competition, and the PRASHAD scheme for pilgrimage and heritage augmentation had sanctioned projects worth about ₹1,597.63 crore (Figure 9). Following the Union Budget 2024-25 announcements, 40 projects across 23 states were sanctioned to develop temple and heritage corridors and other destinations.

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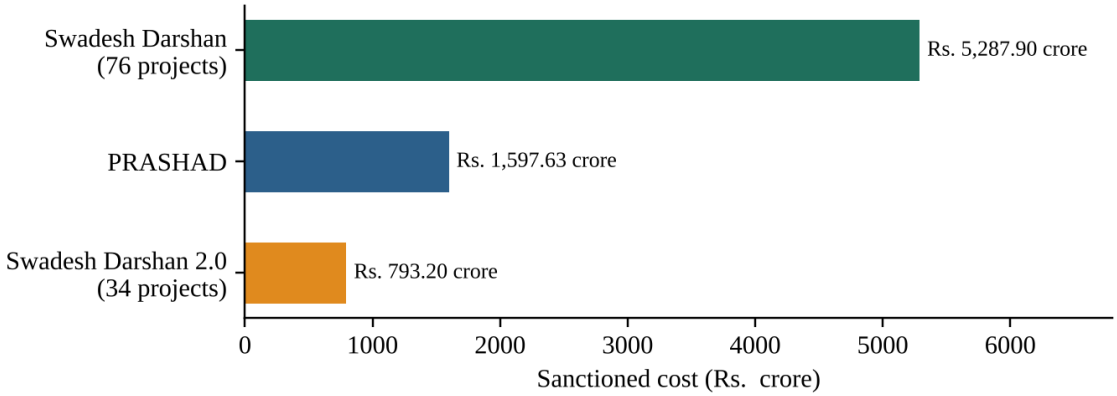


Figure 9. Sanctioned cost of major destination-development schemes (as reported to Parliament, 2024–25)
Source: Ministry of Tourism replies in Parliament (10 Feb 2025; 10 Mar 2025). Authors' plot.

7.3 Thematic circuits and living heritage

Thematic circuits are where cultural content and green infrastructure meet. Swadesh Darshan has organised investment under themes such as heritage, spiritual, Buddhist, Ramayana, Krishna, tribal, rural and eco circuits. A brief, illustrative reading of how these relate to the evidence above follows; it is interpretive and is not a measured result.

- **Pilgrimage and spiritual circuits** generate the largest crowds, as the 646.81 million visits to Uttar Pradesh in 2024 indicate, and therefore carry the highest potential gains from clean energy, water recycling, waste management and electric mobility.
- **Buddhist and international heritage circuits** are oriented to higher-spending foreign visitors; Bihar's 34.8% rise in foreign visits in 2024 shows the potential to bring new states into the international market while expanding local services.
- **Heritage circuits** in states such as Rajasthan can combine adaptive reuse of historic buildings for heritage stays, which avoids the embodied carbon of new construction, with craft-based experiences.
- **Tribal, rural and eco circuits** depend on community-owned enterprises and nature-based assets, which makes them natural candidates for inclusive models where the host community controls how culture and land are shared.

Complementary frameworks include the National Strategy and Roadmap for Sustainable Tourism (2022), the Goa Roadmap for tourism as a driver of the Sustainable Development Goals adopted during India's G20 presidency (2023), and Mission LiFE, which encourages resource-conserving lifestyles. State-level innovations such as Kerala's Responsible Tourism Mission, which links hotels with local producers, show that community-linked models can be scaled (Kerala Responsible Tourism Mission, n.d.). Taken together, these provide a policy base; the gap lies in measurement, since no scheme currently reports emissions, waste, local-sourcing share or women's participation in a standard format.

8. EMPIRICAL EXPLORATION OF THE NEXUS

8.1 Association and elasticity

The correlation matrix in Table 3 shows near-perfect co-movement among arrivals, earnings and domestic visits (r between 0.97 and 1.00), which is expected given the common pandemic shock. Regressing FEE on ITAs gives FEE = -21,442.4 + 1,450.6 × ITA (R^2 = 0.95), meaning that each additional lakh international arrivals is associated with about ₹1,451 crore of earnings, consistent with the ₹1.42 lakh yield per arrival calculated above. A log–log specification yields an elasticity of 1.108: a 1% rise in arrivals is associated with a 1.1% rise in earnings, indicating slightly increasing returns in spending, plausibly through longer stays and higher-value experiences.

8.2 Decomposing growth: volume versus value

Because earnings equal arrivals multiplied by earnings per arrival, the change in log earnings splits exactly into a volume effect and a value (yield) effect. Table 8 and Figure 10 apply this decomposition to three windows. Between 2019 and 2024, earnings grew 35.4%, of which arrivals contributed 14.8% and yield 17.9%, so about 54% of the log gain came from higher earnings per visitor. The 2022–2024 window is more volume-driven (arrivals

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+43.5%, yield +20.1%), because arrivals were still rebuilding. In 2024 alone, earnings rose 10.1%, with arrivals up 8.8% and yield up only 1.2%: the yield gain had largely been achieved in 2022-23, when earnings per arrival rose by 18.7%, and growth in 2024 reverted to being mostly volume-driven.

Table 8. Decomposition of growth in foreign exchange earnings

Period	FEE growth (%)	Arrivals effect (%)	Yield effect (%)	Share from yield (%)
2019–2024	35.4	14.8	17.9	54.4
2022–2024	72.5	43.5	20.1	33.7
2023–2024	10.1	8.8	1.2	12.4

Source: Authors' calculations from Table 2. Shares are based on log growth rates; figures are in nominal rupees.

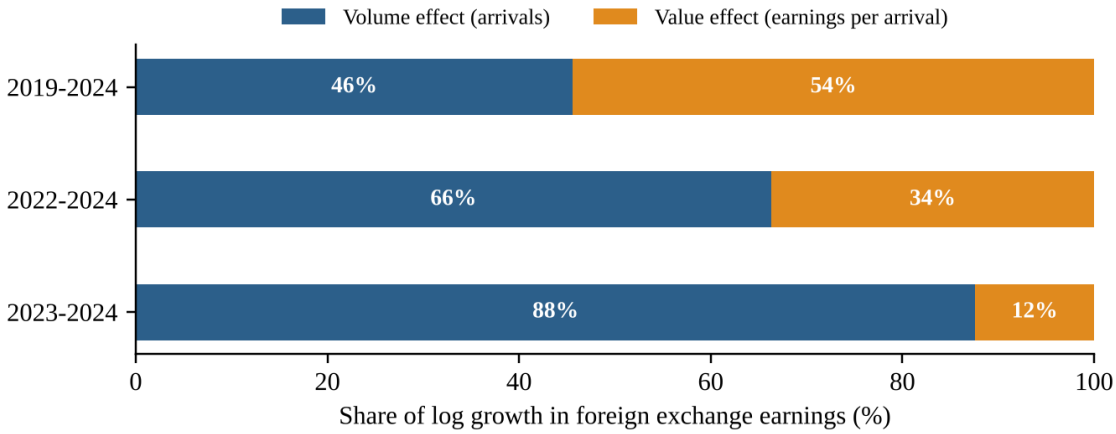


Figure 10. Contribution of volume and value to growth in foreign exchange earnings
Source: Authors' calculations. Share of log growth in FEE attributable to arrivals (blue) and earnings per arrival (orange).

The decomposition has a clear sustainability implication. At the 2024 base, a 10% rise in earnings per arrival adds about ₹29,303 crore without any additional visitor, whereas obtaining the same increase through volume would require about 20.6 lakh more international arrivals, with the accompanying transport, accommodation and waste. This is an arithmetic illustration, not a forecast, and it ignores price effects and the costs of raising quality. It nevertheless shows why the policy emphasis should shift from counting arrivals to raising the value captured per visit, through longer stays, higher-quality cultural products and local value addition.

8.3 Interpretation and limitations

Three limitations apply. First, six observations cannot support inference about causality, and the series are dominated by a single shock. Second, there is no cultural-tourism-specific series, so cultural effects are inferred from circuits and states rather than measured directly. Third, the green dimension is represented by national energy indicators, not destination-level environmental data. The results are therefore best read as a descriptive profile consistent with a value-led recovery, not as an estimate of tourism's environmental or distributional impact.

Read together, the evidence supports four stylised findings: (i) over 2019–2024 the recovery has been value-led, with earnings per arrival above 2019 levels, although the gain flattened in 2024; (ii) domestic demand, much of it cultural and spiritual, is now the main volume driver; (iii) benefits are spatially concentrated, with the top five states taking 64.2% of foreign visits; and (iv) the green enabling environment has strengthened faster than the measurement framework for tourism's own sustainability.

9. PATHWAYS TO SUSTAINABLE AND INCLUSIVE GROWTH

Building on the evidence, Figure 11 and Table 9 set out five mutually reinforcing pathways. They are deliberately designed around instruments that already exist in Indian policy, so that implementation requires re-orientation and convergence rather than new institutions.

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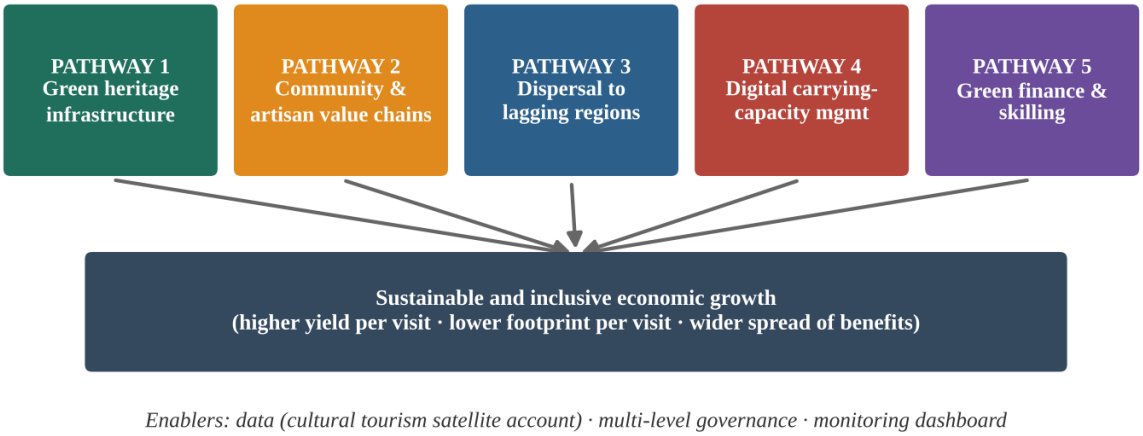


Figure 11. Five pathways linking cultural tourism to sustainable and inclusive growth
Source: Authors' framework.

Table 9. Pathway matrix: interventions, green and inclusion outcomes

Pathway	Key interventions	Green outcome	Inclusion outcome	Lead actors
1. Green heritage infrastructure	Rooftop solar and LED retrofits in monuments and temple precincts; rainwater harvesting; waste segregation; e-shuttles and walkable zones	Lower energy, water and waste per visit; protection of fabric	Local contractors and operators; accessible design	ASI, state tourism boards, urban local bodies
2. Community and artisan value chains	Homestays, craft trails, local-sourcing rules for hotels, GI-tagged product marketing, experience-based itineraries	Shorter supply chains; use of natural and recycled materials	Higher artisan and women's incomes; retention of spending locally	Ministry of Tourism, Ministry of Textiles, SHGs, state missions
3. Dispersal to lagging regions	Integrated circuits linking famous and lesser-known sites; North-East and Buddhist circuits; UDAN and rail connectivity	Reduced congestion at saturated sites	Spread of income to low-share states and rural districts	SD2.0, CBDD, state governments, airlines
4. Digital carrying-capacity management	Timed ticketing, visitor caps, real-time crowd data, dynamic pricing in peak season, shoulder-season promotion	Prevents overuse and heritage damage	Fair access, protection of residents' amenities	ASI, destination management bodies, ICT firms
5. Green finance and skilling	Concessional finance and green-hotel certification; CSR and ticket-levy funds for conservation; green skills for guides and hotel staff	Capital for efficiency and renewables	Youth and women's employability; MSME access to credit	Banks, SIDBI, MoT skilling schemes, industry bodies

Source: Authors' synthesis. Interventions are proposals, not existing programme provisions, except where tied to named schemes.

9.1 Monitoring dashboard

Without common indicators, the five pathways cannot be tracked. Table 10 proposes a short dashboard of indicators drawn from existing sources, with baselines where data are available. Several indicators have no national

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baseline, which in itself signals the priority for data investment, in particular a Cultural Tourism Satellite Account and a standard destination-level environmental return under SD2.0.

Table 10. Proposed monitoring dashboard with latest baselines

Dimension	Indicator	Baseline (latest, ≤2024)	Desired direction
Value	Earnings per international arrival	₹1,42,463 (2024)	Rising in real terms
Growth	Tourism share in GDP / jobs	5.22% / 84.63 million (2023-24 P)	Rising, with decent-work standards
Inclusion	Top-five states' share of foreign visits	64.2% (2024)	Falling
Inclusion	North-Eastern share of foreign visits	1.17% (2024)	Rising
Green policy	SD2.0 sanctioned projects / cost	34 / ₹793.20 crore (early 2025)	Rising, with outcome reporting
Energy	Renewable capacity incl. large hydro	209.44 GW (Dec 2024)	Rising; track share used in tourism assets
Sustainability	Emissions, waste and water per visitor-day	No national baseline	To be established
Inclusion	Local-sourcing share; women's share in tourism jobs	No national baseline	To be established

Source: Authors' compilation from Tables 2–7.

9.2 Governance and financing

The pathways cut across ministries and levels of government, so convergence is the central governance challenge. The Ministry of Tourism has already collaborated with civil aviation under the regional connectivity scheme, with 53 tourism routes operationalised by November 2024, which shows that cross-ministry convergence is feasible. Table 11 summarises a division of roles. The Centre should set standards and finance destination schemes; states should regulate carrying capacity and circuit planning; local bodies should deliver waste, water and mobility services; communities should co-design and steward cultural content; and the private sector and financial institutions should supply green investment and certification.

Table 11. Division of roles for green and inclusive cultural tourism

Actor	Primary role	Illustrative instruments
Union ministries (Tourism, Culture, Environment, MNRE, Textiles)	Set standards, finance destinations, publish indicators	Swadesh Darshan 2.0, PRASHAD, CBDD; ASI conservation; MNRE rooftop and solar programmes
State governments and tourism boards	Destination planning, regulation, carrying-capacity rules	State tourism policies, responsible-tourism missions, homestay rules
Local bodies	Waste, water, mobility and local planning	Solid-waste systems, pedestrian zones, tourist levies
Communities, SHGs and artisans	Co-design, hosting and stewardship of living heritage	Community tourism enterprises, craft cooperatives, GI tags
Private sector and financial institutions	Green investment, certification, local sourcing	Green loans, CSR conservation funds, sustainability standards

Source: Authors' synthesis.

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9.3 Sequencing

Implementation can be phased so that early actions rely on existing schemes and data, while longer-term changes build new capabilities (Table 12). The phasing is indicative and should be adapted to destination conditions.

Table 12. Indicative phasing of actions

Horizon	Priority actions	Indicators of progress
Short term (0–2 years)	Standard sustainability reporting under SD2.0 and PRASHAD; pilot green retrofits and metering at selected high-footfall heritage sites; designate North-East circuits	Share of sanctioned projects reporting indicators; pilot sites with energy, water and waste data
Medium term (2–5 years)	Scale rooftop solar and e-mobility in heritage cities; local-sourcing rules in assisted projects; first Cultural Tourism Satellite Account; link green certification to concessional finance	Falling concentration of visits; rising local-sourcing share; stable or rising earnings per arrival
Long term (5+ years)	Carbon-informed destination management; integrated multi-state circuits; ring-fenced conservation funds from tourism revenue	Emissions and waste per visitor-day declining while visits grow; North-East share rising

Source: Authors' proposals.

10. DISCUSSION: ANSWERING THE RESEARCH QUESTIONS

The evidence assembled in Sections 4 to 9 allows each research question to be answered, with the caveat that the data are aggregate and largely associational.

- **RQ1 (scale and value).** By 2024, international arrivals stood at 114.8% of their 2019 level, earnings at 135.4% and domestic visits at 127.0%. Over the five-year window, 54% of the growth in earnings came from higher earnings per arrival, but in 2024 the yield effect was only 1.2% and growth was mostly volume-driven. Domestic cultural and spiritual circuits are the main volume engine.
- **RQ2 (inclusion).** Benefits are concentrated. The top five states took 64.2% of foreign visits, the Gini coefficient across states and UTs is 0.74, the North-East's share is 1.17%, and five source markets supply about 56% of foreign arrivals. Employment is a more encouraging indicator, with 84.63 million tourism jobs in 2023-24, but the quality, gender and local-sourcing dimensions are not measured.
- **RQ3 (green conditions).** The enabling environment is favourable: 209.44 GW of renewable capacity, 47.24% non-fossil share in installed capacity, and sustainability criteria embedded in Swadesh Darshan 2.0. The binding constraint is not technology or finance but measurement and convergence at the destination level.
- **RQ4 (pathways).** Five pathways, supported by a short dashboard, can align cultural tourism with sustainable and inclusive growth: green heritage infrastructure, community and artisan value chains, regional dispersal, digital carrying-capacity management, and green finance with skilling.

These findings are consistent with the nexus framework in Figure 1 in one important respect: green infrastructure behaves as a complement to cultural tourism rather than as a constraint on it, because it protects the assets, lowers operating costs and raises the quality of the visitor experience. The findings also qualify the optimistic reading of recovery. A sector that has regained its scale but not widened its geographic base, and whose latest growth is volume-led, remains exposed to congestion costs and to shocks that hit a few concentrated destinations or source markets.

11. RISKS AND CHALLENGES

Five risks deserve attention. **Over-tourism and heritage stress** is the most immediate, since surges such as the 35% jump in visits to Uttar Pradesh in 2024 can overwhelm water, waste and mobility systems. **Leakage** limits benefits when hotels and tour operators source inputs from outside the destination. **Commodification** can erode the authenticity of living traditions if communities do not control how culture is presented. **Data gaps** prevent evidence-based policy, as the absence of cultural-tourism and emission statistics shows. **Climate risk** is a growing threat, as heatwaves, floods and glacial hazards affect many pilgrimage and heritage destinations and raise insurance and maintenance costs. Each risk is addressable through the pathways above, but only if environmental and community safeguards are built into project design from the outset rather than added later.

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Two further considerations deserve emphasis. On **equity**, the benefits of cultural tourism accrue unevenly: those who own land, heritage buildings or capital capture most of the gains, whereas artisans, guides, women and informal workers are often price-takers. Benefit-sharing arrangements, such as community revenue shares, cooperative marketing and minimum standards for working conditions, are therefore as important as infrastructure. On **climate resilience**, many heritage sites are exposed to heat, flooding and slope instability, so conservation budgets will increasingly need to cover adaptation, for example drainage, shade, cooling and early-warning systems, in addition to restoration. Treating resilience as part of destination development makes projects more durable and protects tourism employment from climate shocks.

12. POLICY IMPLICATIONS

- **Make sustainability criteria binding in all destination schemes.** Projects under Swadesh Darshan 2.0, PRASHAD and the Budget-announced corridors should report standard indicators on energy, waste, water, local sourcing and gender at approval, mid-term and completion.
- **Target value, not just volume.** Marketing should emphasise longer stays, shoulder-season travel and experience-based cultural products, which raise earnings per visitor without proportionately raising pressure; this matters because 2024 growth was mostly volume-driven (Section 8.2).
- **Link tourism revenue to conservation.** Dedicated shares of ticket revenue, CSR funds and green bonds can be ring-fenced for heritage conservation and local green infrastructure.
- **Invest in the North-East and other low-share regions** through integrated circuits, last-mile connectivity and homestay-based models, with capacity limits set in advance.
- **Build the evidence base.** A Cultural Tourism Satellite Account, destination-level carbon accounting and an annual sustainability report by the Ministry of Tourism would close the principal information gaps.

13. LIMITATIONS AND FUTURE RESEARCH

The study relies on aggregate secondary data, and several series have been revised across publications (for example, the 2023 domestic visits and the foreign exchange earnings series), so small differences may arise relative to earlier releases. FTVs are visit counts rather than unique tourists. Because the data do not isolate cultural tourists, future research should use visitor surveys at heritage sites, state-level panel data and input–output or computable general equilibrium models to estimate the multiplier, emission and distributional effects of cultural tourism. Destination case studies of Varanasi, Hampi, Jaipur and Kerala's responsible-tourism clusters would add the qualitative depth needed to test the pathways proposed here.

14. CONCLUSION

India's tourism sector has recovered beyond its pre-pandemic scale, and over the five-year window the recovery has been value-led: earnings in 2024 were 35.4% above 2019 on arrivals only 14.8% higher, even though 2024 growth itself was mostly volume-driven, domestic visits were 27.0% higher, and tourism supported about 84.6 million jobs. The recovery has, however, been geographically narrow, with five states absorbing almost two-thirds of foreign visits and the North-East almost none. At the same time, India's green transition, symbolised by 209.44 GW of renewable capacity and a policy shift towards sustainable and responsible destinations, offers the enabling conditions for a low-carbon cultural tourism model.

Realising this potential requires a shift from counting visitors to managing outcomes. The five pathways proposed—green heritage infrastructure, community and artisan value chains, regional dispersal, digital carrying-capacity management, and green finance with skillingtogether with a compact monitoring dashboard, offer a practical route. If implemented, cultural tourism can become not only a source of foreign exchange and jobs but also a vehicle for conserving heritage, spreading opportunity and advancing India's climate commitments.

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