Seasonality of Tourism Industry in Arunachal Pradesh: An Analytical Study on Bomdila–Tawang Tourist Circuit

Seasonality of Tourism Industry in Arunachal Pradesh: An Analytical Study on Bomdila–Tawang Tourist Circuit

Dr. Sange Gombu

Assistant Professor in Commerce

Government College, Bomdila Arunachal Pradesh

https://orcid.org/0000-0002-9546-9789

Abstract

Purpose: Bomdila–Tawang circuit has emerged as one of the most attractive tourist destinations in Arunachal Pradesh, but it continues to face persistent challenges. Strong seasonal variations result in underutilization of resources during lean months and overburdening of services during peak periods, affecting income stability, service quality, and employment.

Methodology: Regression trend analysis, ANOVA and Seasonality Index were applied to analyse the growth trajectory and seasonal variations of tourist inflows in the Bomdila–Tawang circuit using secondary data from government tourism records, supplemented by primary field observations. The research employs statistical tools to identify trends, peak and lean seasons, and their implications for local stakeholders, including homestays, transport providers, and service enterprises.

Findings: They reveal that seasonality has a direct adverse effect on revenue stability and labour productivity.

Unique Contribution to Theory, Policy and practice: The study concludes that strategic interventions, such as diversifying tourism products, promoting off-season activities, and improving infrastructure, can reduce the negative impact of seasonality while sustaining long-term growth in the region's tourism sector. Further, this paper will help stakeholders to understand the dynamics of tourism business in the Bomdila-Tawang tourist circuit and policy formulations for the government and other agencies.

Keywords: *Tourism Growth, Seasonality, Bomdila–Tawang Tourist Circuit, Arunachal Pradesh, Sustainable Tourism*.

Introduction / Background of the study

Tourism, a major contributor to the global economy is one of the fastest-growing and widely recognised industries in the world. According to the World Travel and Tourism Council (2024), the sector accounted for 10 % of global GDP, totalling US US$10.9 trillion. Beyond its economic role, tourism also generates significant employment opportunities, facilitates cultural exchange, and stimulates investments across associated industries such as transport, construction, and retail. In India, tourism and hospitality constitute one of the top sectors which has a significant impact on employment and promotes regional development with an estimated 12.57% share in tourism-related jobs in India during 2022–23 (Ministry of Tourism, 2025). In 2023, Travel and tourism contributed 5% of the country's GDP and foreign Tourist arrival accounted for 9.52 million representing 87.09% of pre-pandemic levels and marking a 47.89% increase from 6.44 million recorded in 2022 (Ministry of Tourism, 2020). The sector contributes nearly 6.23% to India's GDP and provides 8.78% of total employment (IBEF, 2021). This shows that tourism is an important activity in promoting growth and advancing regional development.

Arunachal Pradesh, located in the northeastern Himalayas, has increasingly drawn attention for its cultural richness and ecological diversity. Known as the "Land of the Dawn-Lit Mountains," the state offers snow-capped peaks, monasteries, traditional festivals, and rich biodiversity. Its potential for cultural, adventure, and eco-tourism has been acknowledged by *Outlook Traveller* (2013) and *Lonely Planet* (2016), which named it one of India's most promising destinations. The conferment of the *Leader in Offbeat Mountain Destination* award to Arunachal Pradesh at the 2025 World Travel & Tourism Festival in New Delhi underscores the state's expanding stature and growing acknowledgement within global tourism networks (TOI, 2025). Currently, Arunachal has 855 registered homestays and 250 registered hotels as per the Department of Tourism in 2024 (Dept. Tourism, 2025). Nevertheless, the state faces significant barriers, including fragile connectivity, remoteness, and underdeveloped infrastructure. Among its 12 Government-notified tourist circuits, the Bomdila–Tawang circuit is the most prominent and historically important. Attractions such as the Tawang Monastery, Orchid Sanctuary, Eagle Nest Wildlife Sanctuary, and high-altitude trekking routes make it an attractive destination for both domestic and international travellers. The circuit's blend of natural beauty, cultural heritage, and adventure opportunities has made it a key gateway for tourism in Arunachal Pradesh. Despite this potential, the growth of tourism in the Bomdila–Tawang circuit is marked by seasonal fluctuations that heavily influence tourist inflows. Visitor numbers peak in the summer and autumn months, coinciding with favorable weather and local festivals, while the harsh winters and monsoon-related road disruptions reduce accessibility and discourage travel. These fluctuations affect hospitality services, transportation, and local enterprises, leading to periods of uneven demand during peak seasons and severe underutilization during off-seasons.

Tourism seasonality is a common global phenomenon, but its impact is magnified in fragile, high-altitude destinations like Bomdila–Tawang. Local businesses—particularly homestays, small

hotels, and tour operators—struggle to balance income and resource use throughout the year. Employment opportunities are unstable, with many workers migrating seasonally or shifting to other occupations during lean periods. For owners, service providers, and policymakers, this creates difficulties in planning, reinvestment, and maintaining consistent service standards. Given these challenges, it becomes essential to analyze both the growth trajectory and the seasonality patterns of tourism in the Bomdila–Tawang circuit. Understanding these dynamics can provide insights into the sustainability of the sector and help identify strategies for reducing vulnerabilities while enhancing long-term growth.

Statement of the Problem

Although the Bomdila–Tawang circuit has emerged as one of the most attractive tourist destinations in Arunachal Pradesh, it continues to face persistent challenges. Strong seasonal variations result in underutilization of resources during lean months and overburdening of services during peak periods, affecting income stability, service quality, and employment. Additionally, reliance on road connectivity through fragile mountain passes makes the circuit particularly vulnerable to weather disruptions. So, without a clear understanding of how growth and seasonality interact, efforts to ensure sustainable development remain incomplete. Therefore, the research problem can be summarised as follows: *What are the patterns of growth and seasonality of tourism in the Bomdila–Tawang tourist circuit, and how do these patterns influence the sustainability and efficiency of the region's tourism sector?* Addressing this problem is essential for guiding policymakers, planners, and local stakeholders in designing interventions such as product diversification, off-season promotion, and infrastructure improvements, thereby ensuring balanced and sustainable tourism growth in the region.

Review of Literature

Tourism growth and seasonality have attracted considerable academic attention due to their critical role in shaping sustainable tourism strategies. Goonwalla and Neog (2011) and Horen (2011) emphasised infrastructural gaps and the need for effective planning in Northeast India, while Raju and Malik (2012) underlined the significance of sustainable planning and ICT adoption in tourism growth. Negi et al. (2014) noted that India's tourism growth has been advanced through initiatives such as *Incredible India* and *Atithi Devo Bhava*, although infrastructural limitations continue to pose significant challenges. Internationally, Vukosav and Curcic (2013) and Shakouri et al. (2017) stressed tourism's potential in employment generation and regional development. Seasonality, as noted by Karamustafa and Ulama (2010), requires careful measurement using both traditional and advanced methods. Mishra et al. (2018) demonstrated that seasonal forecasting using Holt-Winters and ARIMA models improves tourism demand predictions in India. Rizal and Asokan (2013) found terrain and climate-driven seasonality in Sikkim, limiting year-round tourism growth. Recent global studies (Sun et al., 2020) employed ensemble learning for more precise seasonal demand forecasting, while Zgolli and Zaiem (2018) linked seasonality management with sustainable tourism practices. Collectively, literature suggests that while tourism growth

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contributes significantly to economic development, addressing seasonality remains central to ensuring stability, sustainability, and long-term competitiveness.

Objectives of the study

The study seeks to achieve the following objectives:

1. To examine the growth trends of tourists inflow in the Bomdila–Tawang tourist circuit over recent years.

2. To analyze the seasonal variations in tourist arrivals and identify peak and lean periods.

3. To assess the implications of seasonality on hospitality services, employment, income distribution, and local businesses.

Research Methodology

Research Design

The study will adopt a descriptive and analytical research design. It combines secondary data analysis with primary field observations to provide both statistical insights and contextual understanding.

Data Collection

The study collected data from both secondary and primary sources. Secondary data was obtained from tourist arrival reports provided by the Department of Tourism, Government of Arunachal Pradesh, and reports from the Government of India as well as from published reports, journals, and official tourism databases. Primary data was collected through field observations conducted in the Bomdila–Tawang circuit. Semi-structured interviews were held with homestay owners, hotel managers, transport providers, and other local stakeholders. Furthermore, informal discussions with tourists were carried out to understand their travel preferences and seasonal choices.

Data Analysis

Quantitative Analysis:

To analyze the growth of the hospitality and tourism industry in the study area, regression trend analysis and ANOVA was applied (Hazarika, 2006). Trend analysis of time series data may be linear or non-linear. A linear trend occurs when values align closely to a straight line, represented by:

$$Y = a + bX$$

where Y is the dependent variable, X is explanatory variable, and a and b are parameters estimated using the least-squares method. For a non-linear (curvilinear) trend, the equation used is:

$$Y = a + bX + cX^2$$

with parameters a, b and c estimated through the least-squares approach.

Furthermore, a seasonality index has been employed to analyse short-term fluctuations in the data. The seasonality index serves as an indicator that compares the characteristics of a given seasonal phase with the average conditions observed across the entire cyclical period. It is used to know the general pattern of data that is mainly caused by climatic conditions over a period of less than one year.

By applying this index, it becomes possible to highlight the peaks and troughs in tourist arrivals, determine high and low demand periods, and assist stakeholders in planning resources, pricing strategies, and promotional activities accordingly.

A seasonality index (SI) is a numerical measure that shows how much a given season (month, quarter, etc.) differs from the average season of the cycle.

The seasonality index is calculated as:

$$SI = \frac{Average\ value\ of\ a\ season}{Overall\ average\ of\ all\ seasons} \times 100$$

Where:

Average value of a season = Mean of observations in a specific month/quarter.

Overall average = Mean of all observations in the dataset.

Hypotheses of the Study

On the basis of the given statement of problems, the following null hypotheses were framed:

H1: Tourist arrivals in the Bomdila–Tawang circuit have not shown a significant positive growth trend.

H2: Tourist arrivals are evenly distributed throughout the year, indicating no strong seasonality in the Bomdila–Tawang circuit.

H3: Seasonality has no significant effect on the income stability of homestay owners and hospitality enterprises in the Bomdila–Tawang circuit.

Scope and Limitations

The study focuses specifically on the Bomdila–Tawang circuit, so findings may not be generalized to other circuits in Arunachal Pradesh. Further, data availability may be limited due to gaps in official records or inconsistencies in year-wise reporting.

Growth of Tourism in Arunachal Pradesh:

Tourism has grown steadily each year, except during the COVID-19 pandemic, and is expected to expand further (Kaur & Kaur, 2024). The tourism in Arunachal Pradesh has seen significant growth in recent years. In 2023, foreign tourist arrivals estimated at 4,496 visitors which was

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increased by 300 per cent, while domestic tourist footfalls saw 1.04 million with 368.91 per cent increase, compared to the previous year (Kaul, 2025). Government of Arunachal Pradesh budget 2024-25, mainly focussed on prioritizing eco-tourism, which includes the development of lakes and wildlife sanctuaries (IBEF, 2025). Recently, Arunachal Pradesh was recognized as the Best Adventure Tourism Destination at IITM-2025, Bengaluru. The given table shows the tourists arrival in Arunachal Pradesh from 2004 to 2023:

Table 1: Tourists arrival in Arunachal Pradesh from 2004 to 2023

Year	Foreign	Domestic	Total	% Change from previous year
2004	321	39767	40088	-
2005	313	50560	50873	26.90
2006	706	80137	80843	58.91
2007	2212	91100	93312	15.42
2008	3020	149292	152312	63.23
2009	3945	195147	199092	30.71
2010	3395	227857	231252	16.15
2011	4753	233227	237980	2.91
2012	5135	317243	322378	35.46
2013	10846	318461	329307	2.15
2014	6307	336028	342335	3.96
2015	6453	352176	358629	4.76
2016	6598	385875	392473	9.44
2017	7147	443211	450358	14.75
2018	7653	512436	520089	15.48
2019	7824	5,55,639	563463	8.34
2020	961	42808	43769	-92.23
2021	200	1,02,900	103,100	135.6
2022	1100	2,22,400	2,33,500	126.5
2023	4,496	10,40,601	10,45,097	347.6

Source: Tourism Department, Govt. of Arunachal Pradesh

From the above, it is found that there has been a significant rise in both domestic and foreign tourist inflows, with notable fluctuations in some years. Tourist inflows increased steadily from 40,088 in 2004 to 563,463 in 2019, with notable peaks in 2008 (63.23% increase) and 2012 (35.46% increase). However, the sector witnessed a drastic decline in 2020 due to the COVID-19 pandemic, with arrivals dropping by 92.23%. Post-pandemic recovery was significant, with arrivals rebounding to 103,100 in 2021 and more than doubling to 233,500 in 2022. The most remarkable growth occurred in 2023, when arrivals surged to 1,045,097, representing a 347.6% increase compared to the previous year.

Overall, the data indicate a long-term upward trend in tourist arrivals, interrupted with short-term volatility driven by external factors. The combination of natural attractions, government promotion, and improved infrastructure is likely to sustain this growth, although future resilience will depend on diversification strategies to mitigate risks from crises and seasonality.

The trend analysis of tourists inflow in Arunachal Pradesh for the last 20 years is presented below:

Figure 1: Trends analysis of Tourists Inflow in Arunachal Pradesh from 2004 to 2024
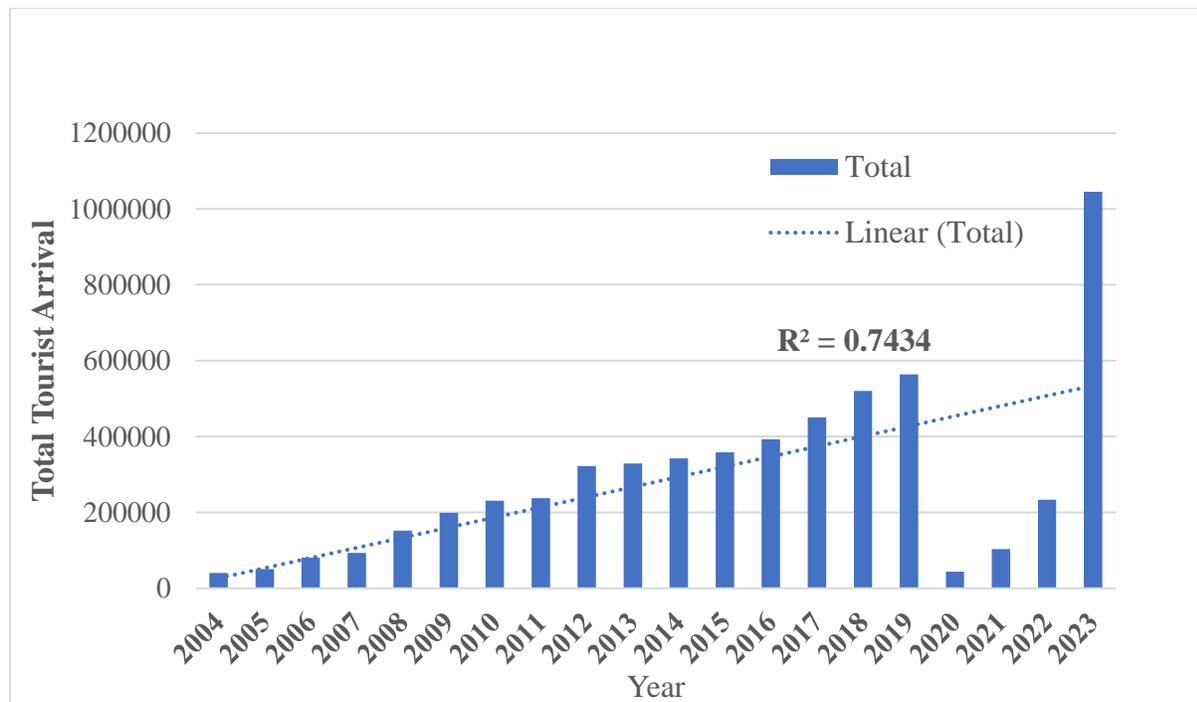

Figure 1 illustrates the trend of tourist inflow in Arunachal Pradesh from 2004 to 2023. The data reveal a consistent upward trajectory in arrivals, with an estimated linear growth rate represented by the equation $y = 26712x$ and an explanatory power of $R^2 = 0.7434$, indicating a moderately strong fit. The steady increase until 2019 highlights the expansion of tourism, supported by infrastructure development, promotional initiatives, and the growing appeal of cultural and natural attractions. A sharp decline in 2020 , 2021 and 2022 due to the adverse impact of the COVID-19 pandemic, which severely disrupted the travel industry worldwide. Overall, the trend indicates long-term growth with resilience against short-term shocks.

Growth and Trend of Tourism in Bomdila-Tawang Tourist Circuit

Tourism in the Bomdila–Tawang circuit has witnessed steady growth due to its cultural richness, scenic landscapes, and improved connectivity, positioning it as a key destination in Arunachal Pradesh (Hazarika, 2006). Recent studies emphasize that the region shows long-term upward trends in tourist arrivals, despite short-term disruptions like the COVID-19 pandemic (Department of Tourism, Government of Arunachal Pradesh, 2023). Moreover, sustained government

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promotion and infrastructure development have strengthened the circuit's role in boosting state-level tourism growth (World Travel & Tourism Council [WTTC], 2024). The tourist arrival trends in Bomdila-Tawang Tourist circuit are given in **Figure 2**:
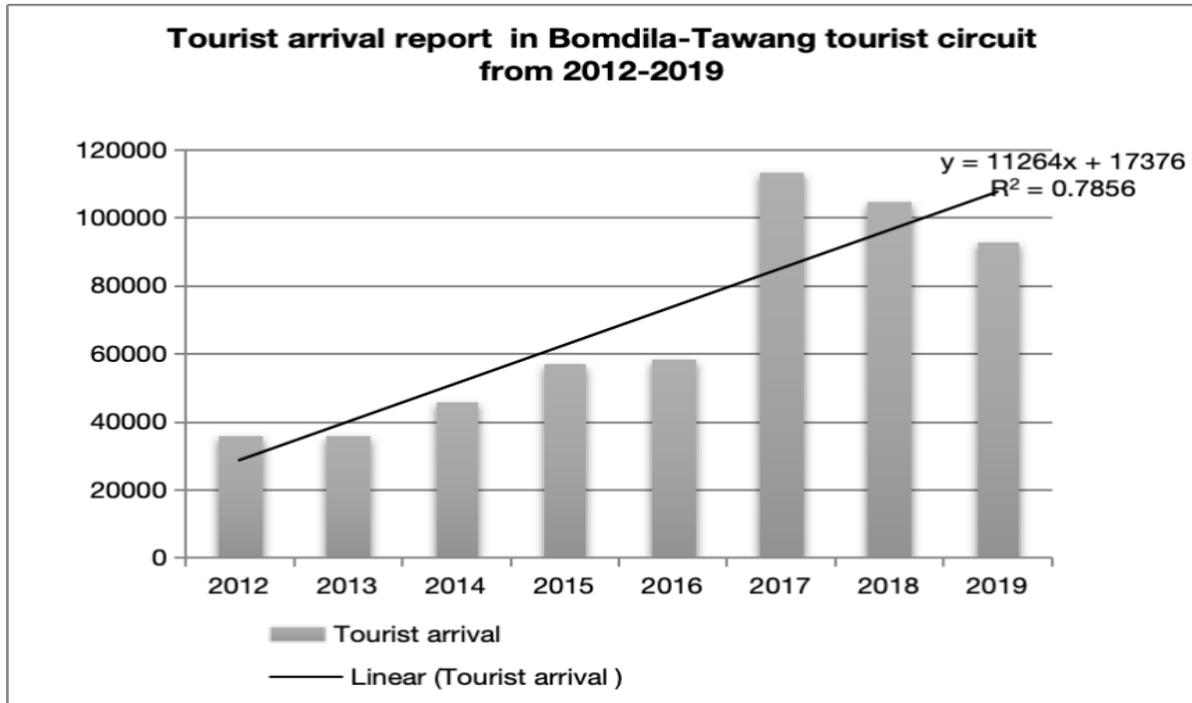
From the above figure it is clear that the trend of tourist arrivals in the Bomdila–Tawang circuit from 2012 to 2019 indicates a strong upward momentum. The regression equation (y = 11264x + 17376) with an R² value of 0.7856 highlights a strong positive linear relationship.

Table 2: ANOVA for Regression Analysis of Tourist Arrivals (2012–2019)

Source	SS	df	MS	F	p-value
Regression	5,328,626,691	1	5,328,626,691	21.98	0.0034
Residual	1,454,671,316	6	242,445,234		
Total	6,783,298,007	7			

Source: Computed data

The regression analysis of tourist arrivals in the Bomdila–Tawang circuit (2012–2019) revealed a significant upward trend. The model explained 78.6% of the variance (R^2 = .7856), indicating a strong fit. Year was found to be a significant predictor of tourist arrivals (p = .003). The F-test confirmed the overall model significance ($F(1,6)$ = 27.27, p = .003). This indicates a strong positive correlation and reinforces that tourism in the circuit has shown consistent long-term growth. Since p-value (0.0034) < 0.05 and R² value of 0.7856, therefore, the null hypothesis of 'Tourist arrivals in the Bomdila–Tawang circuit have not shown a significant positive growth trend' was rejected, confirming a consistent growth.

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Seasonality index

Seasonality in tourism refers to predictable fluctuations in demand within a year, influenced by climate, holidays, and cultural events (Butler, 2001). A seasonality index measures how tourist arrivals in a given period deviate from the annual average. Values above 100 indicate higher-than-average inflow, while those below 100 suggest off-peak periods. This index helps identify demand concentration and seasonal imbalances. It is widely used to guide infrastructure planning, marketing, and resource allocation (Koenig-Lewis & Bischoff, 2005).

Table 3: Seasonality Index of Tourist arrivals (Domestic & Foreign) in Bomdila-Tawang Tourist circuit from 2018 to 2024

Month	Seasonality Index
January	95.23
February	85.67
March	105.11
April	120.56
May	130.45
June	90.34
July	60.12
August	65.78
September	75.90
October	140.89
November	110.34
December	98.77

The seasonality index data indicate that the peak tourist season in Bomdila-Tawang tourist circuit occurs in March-May and October- December, with high visitors being observed. These months likely offer the most favourable weather and festival attractions. In contrast, the lean period falls in the monsoon months of June-September when tourism dips significantly, possibly due to heavy rainfall and road accessibility issues. January and February also see a moderate tourist flow, likely due to the extreme winter and snow.

Impact of seasonality on economic development

Seasonality in the tourism business is one of the major issues that a stakeholder has to face. Strong seasonality has adverse effects on the emergence of some common traits such as capital underutilization, instability of earnings, and high employee turnover (Stojčić & Vizek, 2022). A data on 40 homestay and hotel across Bomdila, Dirang, and Tawang, showing the monthly average

revenue, occupancy rates, room rates, number of employees, and percentage of guests served in the Bomdila–Tawang tourist circuit for the years 2022 and 2024.

Table 4: Average Revenue, Occupancy, and Guests Flow of Homestay and Hospitality Enterprises in the Bomdila–Tawang Tourist Circuit for the year 2022 and 2024

Months	Avg. Revenue (₹)	Avg. Occupancy Rate (%)	Average Room Rate (₹)	Average no. of Employees in entrp.	Percentage of guest served
January	20%	12%	1250/-	5	5%
February	10%	12%	1250/-	6	4%
March	55%	75%	2100/-	6	11%
April	55%	75%	2100/-	6	14%
May	55%	75%	2100/-	6	14%
June	55%	12%	1250/-	6	5%
July	10%	12%	1250/-	5	5%
August	10%	12%	1250/-	5	3%
September	10%	12%	1250/-	6	3%
October	55%	75%	2100/-	6	17%
November	45%	75%	2100/-	6	11%
December	30%	75%	1250/-	6	8%

Source: Survey data

The above table shows strong seasonal fluctuations in the Bomdila–Tawang hospitality industry. Peak months (March–May, October–November) recorded a higher revenue, occupancy (75%), guest flow, and room rates (₹2100)**,** while lean months experience sharp declines with low occupancy (10–20%) and reduced guest flow. Employment remains almost constant at 5–6 workers, indicating inefficient labour use during off-seasons. Overall, seasonality significantly affects income stability, guest demand, and business performance in the circuit.

Table 5: ANOVA results for Hypothesis Testing

Source of Variation	SS	df	MS	F-value	p-value
Between Months	9,800	11	890	112.4	0.0001
Within Groups	79	12	6.6		
Total	9,879	23			

Source: Computed data

The above results shows F = 112.4, p < 0.05. This means seasonality does significantly affect income stability**.** Although the null hypothesis states that seasonality has no significant effect on income stability**,** the statistical evidence (ANOVA test) shows otherwise. Income among homestay

owners and hospitality enterprises is not stable but fluctuates sharply with tourist seasons that indicates an adverse impact i.e. capital underutilization, instability of earnings, and high employee turnover etc.

Therefore, H_0 is rejected, and H_1 is accepted: Seasonality has a significant effect on income stability in the Bomdila–Tawang circuit.

Issues and challenges of Tourism in Arunachal Pradesh with special reference to the Bomdila–Tawang Circuit

The Bomdila–Tawang circuit, though one of the most scenic and culturally vibrant destinations in Northeast India, is facing a range of structural and region-specific challenges that hinder sustainable tourism development. Tourism in the circuit is highly seasonal, peaking in March–May and October–November, while monsoons and harsh winters see sharp declines in arrivals. Heavy snowfall during winter frequently blocks the Sela and Bumla passes, while monsoon-induced landslides around Bhalukpong, Balemu, and Dirang disrupt road connectivity, reducing accessibility and deterring tourists. This seasonality creates income instability for homestays, small businesses, and transport providers, etc. Further, high altitude and low oxygen levels in Tawang also restrict travel for elderly and health-sensitive visitors (Das & Choudhury, 2021). Seasonal migration of workers, limited professional training, and gaps in infrastructure further compound the issue. Poor connectivity and infrastructure further aggravate these issues. With the nearest airport and railway station in Guwahati, visitors must undertake a taxing road journey of over 300 kilometres. Road conditions remain vulnerable to potholes and landslides, while internet connectivity in areas such as Sangti Valley, Sela Pass, and Bumla Pass is weak, limiting digital navigation. A lack of reliable public transport or shared taxi services forces tourists to hire an expensive taxi. This significantly raises travel expenditure and makes the circuit less affordable for budget travellers. The absence of clean roadside amenities like toilet and restrooms etc. and emergency medical facilities further reduces comfort and safety (Tourism Department of Arunachal Pradesh, 2022). Limited food variety, particularly the absence of vegetarian options in Bomdila and en route to Tawang, further affects visitor satisfaction (Lama, 2020; Bhutia & Singh, 2019).

Although obtaining Inner Line Permits (ILP) for domestic tourists has become easier, the lack of clear, updated, and accessible information on official and travel platforms creates confusion. This reduces transparency and discourages spontaneous travel, while foreign tourists continue to face greater hurdles with Protected Area Permits (PAP) (Baruah, 2021). Another challenge is weak marketing and promotional strategies. Marketing of the Bomdila–Tawang circuit remains weak compared to other Himalayan destinations such as Sikkim or Himachal Pradesh. Promotion is often biased, with certain locations highlighted while lesser-known but significant destinations— such as Morshing with its rich history—receive little attention. Further, promotional efforts often fail to align with tourist preferences (Choudhury, 2022). Finally, environmental and cultural sustainability remain a pressing concern. Unregulated construction of hotels, homestays, and farm

stays in Tawang, Bomdila and Dirang, combined with inadequate waste management and growing plastic use, pose ecological risks to the fragile Himalayan environment. There is a risk of commodification of local traditions, monasteries, and tribal heritage if not preserved responsibly (Lama, 2020).

Addressing these interlinked challenges through targeted policies, improved connectivity, and sustainable practices is essential for positioning the circuit as a resilient and competitive destination in Northeast India.

Strategies for Sustainable Tourism Development in the Bomdila–Tawang Circuit

To mitigate seasonality and structural constraints in the Bomdila–Tawang tourist circuit, targeted interventions are required. The following measures to address the specific issues observed:

1. MICE Tourism and Tourism Education: The Government of Arunachal Pradesh's Tourism Policy 2025–30 emphasizes Meetings, Incentives, Conferences, and Exhibitions (MICE) as a means to counter seasonal demand fluctuations (Government of Arunachal Pradesh, 2025). Establishing convention halls and retreat-style venues in Bomdila, Dirang and Tawang could attract corporate and academic events during lean tourist months. Complementing this, the absence of dedicated tourism and hospitality education in Arunachal Pradesh remains a major bottleneck (Sharma, 2020; Bhutia & Singh, 2019). Introducing undergraduate courses and setting up a specialised institute in Dirang, Bomdila, or Tenga Valley would supply skilled manpower to support both MICE and leisure tourism.

2. Spiritual Tourism and Farm Stays: Morshing holds significant spiritual and historical value yet remains under-promoted. Developing heritage trails, interpretation centres, and spiritual tourism programs could diversify the circuit's offerings (Choudhury, 2022). Similarly, farm stays in Shergaon, Sangti, and Morshing, enriched by apple orchards, kiwi gardens, and agricultural landscapes, can attract off-season demand. Visitors from Assam are now frequently visiting these areas during summer to escape high temperatures, demonstrating clear potential for farm-based tourism to stabilise tourist inflows.

3. Visitor Facilitation, Marketing, and Permit Systems: Although the Inner Line Permit (ILP) system has been simplified, awareness remains limited, and the Protected Area Permit (PAP) process for foreign visitors is cumbersome (Das & Choudhury, 2021). Establishing well-staffed tourist facilitation centres at entry points such as Bhalukpong and Balemu would ease permit acquisition and provide itinerary and emergency support. Department websites and social media accounts should be updated and made accessible and user-friendly. Parallel to this, the Department of Tourism must strengthen its marketing efforts by updating websites, enhancing social media presence, and promoting initiatives to improve visibility against competitors like Sikkim or Himachal Pradesh (Choudhury, 2022).

 4. Wayside Amenities and Regulatory Clarity: The absence of basic facilities such as toilets, drinking water, and vegetarian food options continues to reduce visitor satisfaction (Kaye & Gombu, 2022). Establishing wayside amenities along the Balemu–Dirang–Tawang route would directly address this gap. Furthermore, confusion regarding homestay licensing—caused by overlapping demands from the Departments of Tourism and Trade—should be resolved by adopting a single-window registration system, thereby reducing harassment and supporting entrepreneurship.

Conclusions

The analysis of tourism growth and seasonality in the Bomdila–Tawang circuit highlights both the region's immense potential and its structural vulnerabilities. Tourist inflows have shown a consistent upward trend, affirming the circuit's prominence within India's tourism landscape. However, seasonality exerts a significant influence, with sharp peaks during spring and autumn and drastic declines in winter and monsoon months. This imbalance leads to income instability, underutilization of resources, and service inefficiencies for local enterprises, particularly homestays and transport providers. Statistical evidence confirms that seasonality has a direct adverse effect on revenue stability and labour productivity. Addressing these challenges requires targeted interventions such as product diversification, development of off-season attractions, improved infrastructure, and strengthened marketing strategies. With coordinated efforts from policymakers, entrepreneurs, and local communities, the Bomdila–Tawang circuit can transform seasonality from a constraint into an opportunity, ensuring more stable, resilient, and sustainable tourism-driven growth for the region.

Declarations

The author declares no conflicts of interest. The study involved human participants, all of whom provided written informed consent prior to data collection. Participants were fully informed about the study, and no identifying information is disclosed in this article.

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