

Interactive Dashboard on Goa Tourism – Focusing on Economic Growth (SDG 8)

1. Introduction

Goa is one of India’s most popular tourist destinations, known for its beaches, nightlife, heritage, and culture. Tourism plays a key role in Goa’s economy by generating income, creating jobs, and supporting local businesses.

This project explores key trends in Goa’s tourism industry through data visualization and supports Sustainable Development Goal 8 – Decent Work and Economic Growth by showing tourism’s impact on employment, spending, and infrastructure.

2. Objective

The main objective of this project is to analyze tourism data and create an interactive dashboard using Tableau. The key goals are:

- Identifying seasonal and yearly patterns in tourist arrivals
- Comparing domestic and international tourism behavior
- Exploring travel and spending preferences
- Highlighting how tourism supports local economic development
- Making insights more accessible for decision-makers

3. Data Source and Cleaning Summary

Aspect	Details
Data Source	Provided by Lenovo Internship Program
Size of the Dataset	Approx. 5000 rows × 19 columns
Period Covered	Approx. 2019–2023 (based on year values)
Key Features Used	Year, Month, TouristType, Region, TransportMode, TotalSpend, FeedbackScore, BookingPlatform
Type of Data	Time series, categorical, and numerical

The dataset used for this project, titled “Final Project Dataset”, was provided as part of the Lenovo Internship Program. It contains approximately 5,000 rows and 19 columns, covering tourism-related information in Goa from 2019 to 2023.

To ensure the data was clean and ready for visualization in Tableau, the following steps were performed using Microsoft Excel:

- **Column renaming:** Several column headers were renamed for clarity and consistency (e.g., TouristType, TransportMode, TotalSpend, BookingPlatform, etc.).

- **Handling missing values:** About 2,500 blank cells were identified and filled with the placeholder “Unknown” using the Find and Replace function. This helped maintain completeness without deleting any data.
- **Error correction** Cells showing #SPILL! errors were corrected by re-copying the intended values and replacing error cells with “Unknown”.
- **Date formatting:** The Month column was converted from numeric values (1–12) to corresponding month names (e.g., January, February) using the Find and Replace tool. This improved readability in visualizations.
- **Numeric data check:** All numeric columns such as Total Spend, Avg Daily Spend, and Feedback Score were reviewed to confirm that values were valid and properly formatted.

4. Key Dashboard Components and Visualizations

The dashboard was created in Tableau Public using a professional layout and interactive elements to make insights easy to explore.

The dashboard includes the following major components and interactive visualizations:

- **Monthly Arrivals Trend – Line Chart**

Line Chart showing seasonal and yearly trends in domestic and international tourist arrivals, helping identify peak travel months.

- **Spend by Tourist Type – Circle Chart**

Circle Chart comparing total expenditure by domestic and international tourists, offering insight into economic contribution by group.

- **Yearly Revenue Breakdown – Bar Chart**

Bar Chart splitting yearly tourism revenue by tourist type (domestic vs international), supporting analysis of revenue growth patterns.

- **Purpose of Visit – Pie Chart**

Pie Chart illustrating the distribution of tourism purposes (e.g., leisure, business, pilgrimage), helping understand travel motivations.

- **Tourist Origins Map – Symbol Map**

Symbol Map displaying footfall patterns across Indian states and foreign countries, indicating the geographic source of tourist inflow.

5. Key Insights

- **Monthly Arrivals Trend – Line Chart**

Tourist arrivals in Goa show clear seasonal trends, with peaks in January and March, and a notable dip in September. This indicates that travel is highest during winter and early spring, aligning with holiday seasons and favorable weather.

- **Spend by Tourist Type – Circle Chart**

Although domestic tourists arrive in greater numbers, international tourists spend more per person. This higher average spend highlights their economic significance and suggests potential for premium tourism services.

- **Yearly Revenue Breakdown – Bar Chart**

Tourism revenue in Goa has remained relatively stable from 2019 to 2023, with domestic tourists contributing slightly more overall. This reflects Goa's strong local tourism base and resilience post-pandemic.

- **Purpose of Visit – Pie Chart**

The most common purposes of travel are Wellness (17.4%), Spiritual (17.4%), and Culture (17.3%), indicating that Goa attracts visitors beyond leisure including those seeking health, heritage, and personal enrichment.

- **Tourist Origins Map – Symbol Map**

India remains the top contributor to Goa's tourist inflow, followed by countries like Russia, Japan, and the USA. This highlights opportunities for targeted marketing in both domestic and key international markets.

6. Recommendations

- Promote lesser known regions and seasons to reduce peak-time pressure and spread economic benefits throughout the year. This aligns with seasonal dips seen in September and under-visited areas on the map.
- Develop infrastructure for group and wellness travelers, such as larger accommodations and wellness retreats, to match popular travel purposes and group sizes.
- Tailor marketing campaigns based on feedback trends, visit purposes, and high-spending international segments, focusing on countries like Russia, Japan, and the USA.

These recommendations can improve tourist satisfaction, support local businesses, and contribute to Goa's sustainable economic growth

7. SDG Contribution – SDG 8: Decent Work and Economic Growth

This project supports SDG 8 by showing how tourism in Goa contributes to jobs, services, and spending.

- The dashboard highlights consistent domestic tourism revenue, helping sustain local hospitality and transport jobs.
- Higher per-person spend by international tourists suggests scope for skilled services and premium offerings.
- Seasonal trends help businesses prepare staffing and services better, especially during peak months.
- Purpose-based travel creates opportunities for local wellness providers, guides, and cultural businesses.

8. Tools & Technologies Used

- **Microsoft Excel** – For data cleaning, formatting, and preparation
- **Tableau Public** – For creating the interactive dashboard and visualizations
- **MS Word** – For drafting the project report and documentation

9. Link to Tableau Dashboard

- [Goa Tourism Dashboard – Prerna Muzumdar](#)
[Click here to open the cleaned dataset](#)

10. References

- **Dataset:** Final Project Dataset – Lenovo Internship Program
- **UN SDGs:** <https://sdgs.un.org/goals>
- **Tableau Public Docs:** <https://public.tableau.com/>

11. Visual Appendix – Dashboard Snapshot

