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The Role of Tourism Development and Government Effectiveness on Female Labor Force Participation: Evidence from South Asian Countries

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ABSTRACT

Objective: The study aims to examine the impact of tourism development on female labor force participation in South Asia, while also assessing the moderating role of government effectiveness in enhancing women's participation in the labor market.

Research Gap: Although several studies have examined gender disparities in the labor market or the growth of tourism in South Asia, very few have integrated both tourism development and government effectiveness to explore their combined impact on female labor force participation. Most of the existing research is either qualitative in nature or focused on individual countries. This study fills that gap by using a multi-country dataset and a robust panel estimation technique (FGLS) to provide evidence-based insights into this important development issue.

Design/Methodology/Approach: Due to the presence of cross sectional dependence, autocorrelation and heteroscedasticity in the data, the Feasible Generalized Least Squares (FGLS) regression analysis is used for estimation in this study**.**

The Main Findings: The findings of the present study reveal that international tourism receipts, government effectiveness, and GDP growth impact female labor force participation significantly and positively.

Practical and Theoretical Implications of the Findings: This study has a substantial theoretical contribution to the literature as it integrates two separately studied factors i.e., tourism development and governance into a combined analytical framework to jointly determine their impact on female labor force participation. From policy perspective, the findings provide policymakers and development practitioners with empirical insights to design interventions that simultaneously promote tourism and strengthen governance structures to enhance women's employment opportunities.

Originality/Value: This study is a unique contribution to the literature by filling a major gap as it jointly focuses on tourism development and governance effectiveness as determinants of female labor force participation in South Asia.

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1. Introduction

1.1 Brief Background of the Study

Tourism is one of the fastest-growing industries internationally and plays a significant role in the economic progress of many countries. In South Asia, tourism donates to job creation, revenue generation, and GDP progress(Amaral et al., 2013; Mahwish & Nawaz, 2022). Countries like India, Pakistan, Nepal, and Sri Lanka fascinate millions of visitors every year due to their cultural legacy, natural beauty, and ancient significance (Bhatia & Singh, 2019; Pietkiewicz et al., 2014).

Women in South Asia face numerous difficulties in reaping the benefits of tourism. They are frequently understated in official tourism jobs and overrepresented in casual, low-waged roles (Demirgüç-Kunt et al., 2022). Socio-cultural customs, absence of exercise, security concerns, and weak strategy support bound women's participation in the tourism sector (Baken & Bhagavatula, 2010). Above 60% of females employed in tourism in South Asia are informally employed without permitted shield or public safety (Zhang & Posso, 2019). Government effectiveness plays a central role in shaping plans that promote broad development (Mahwish, 2024). Women's contributions can be enhanced through the implementation of well-designed tourism and work plans, which will ensure access to opportunities, exercise, and safe working conditions. Despite this, there are still many states in the region where gender responsive planning and implementation is missing(Gomes & Blake, 2020; Kayani et al., 2024; Nassani et al., 2019; Rehman et al., 2020; Ruediger Kaufmann et al., 2012; Vujko et al., 2019).

This is a study on the impact of the expansion of tourism and the effectiveness of government on the participation of women in the labor market across eight South Asian countries. The choice of these countries is especially made because of their tourism-based economies and/or the fact that they have been identified as having a tourism sector, their policy documents are publicly available and they share a comparable yet unique socio-cultural and economic environment(Aghazamani & Hunt, 2017; Hall & Jenkins, 2004; JÃ³hannesson, 2005; Meyers-Levy & Maheswaran, 1991; Sharma & Das, 2021)

Each country takes different tourism possessions that improve the scope of this research. For example, Nepal and Pakistan are globally known for their high-altitude sites, including the Himalayas and Karakoram ranges, which entice adventure and eco-tourists. India offers a wide range of tourism involvements from divine and social tourism to nature, health, and tradition tourism making it the most various and spacious tourism economy in the region. Bangladesh has various ironic natural sites and cultural traditions that promote tourism landscapes including the Sundarbans. Similarly, Sri Lanka has many vintage inheritance sites, tropical sites and beaches, as well as biodiversity spots that attract both international and domestic tourists. Bhutan, due to its high gross happiness model, has high rate of tourism, whereas Maldives has luxury naval and island ecotourism. Afghanistan holds significant cultural tourism despite of its political conflicts, with efforts for proceeding towards making this sector having long run inclusion and development(Kayani et al., 2024; Naz et al., 2014; Ramchurjee & Paktin, 2011; Wang & Ap, 2013).

Despite the rapid expansion of the tourism industry in South Asia and its contribution to national economic growth, participation of women in the labor force remains significantly low across the region. Although tourism has the potential to generate employment for women, social norms, informal employment structures, and lack of institutional support prevent them from benefiting equally. Moreover, the effectiveness of the government is an important factor in the design of inclusive labour and tourism policies, and this is not always high but may be lacking in gender responsiveness. There are still no coherent and gender-sensitive policy frameworks in many South Asian countries to create equal opportunities for women in the labour market, especially in the tourism industry. Resultantly, the region still struggles to achieve inclusive economic development. The current study aims to investigate the relationship between tourism development and Government effectiveness on female labor force participation rate in eight South Asian countries from year 2000 to 2024.

This study aims to determine the impact of the tourism development on the female labour force participation in selected countries. It also investigates how government effectiveness affects female labor force participation. It is important to note that this study is one of the few studies in the literature that investigate the factors of tourism development and government effectiveness simultaneously when looking at their impact on female labor force participation. Both areas have been studied extensively, but typically treated as separate subjects. Little empirical research exists that takes into account the interplay between these two forces, especially regarding women's

employment. This study brings them together in one model, which provides a more comprehensive view of the forces affecting female labor market participation. In addition, the study is centered on the United Nations Sustainable Development Goals, particularly Goal 5 (gender equality) and Goal 8 (Economic growth and decent work).

There is a lack of cross-country evidence which simultaneously measures tourism activity and governance quality. The majority of the existing studies are conducted in specific countries and/or are based on qualitative methods, thus restricting the extent of their application. This study fills that gap by using panel data for South Asian countries and by using an econometric approach that enables to draw more reliable and general conclusions.

The inclusion of South Asia is significant as the region is affected by the low labour force participation of women in the midst of ongoing economic transformations and economic expansion in the tourism sector (UN women, 2024). Meanwhile, institutional quality varies from country to country, which is why it is well suited for analyzing the impact of government effectiveness. The situation in South Asia is relevant for understanding the potential synergies of economic opportunities and governance to affect women's work.

The results of the study are also of practical importance. They offer important guidance to policymakers on the fact that, in addition to improvements to tourism, effective governance is needed to achieve the desired results. A combined approach that promotes tourism while strengthening institutions can help create better opportunities for women in the labor market.

1.2 Research Hypotheses

H0: Tourism development and government effectiveness do not impact female labor force participation significantly in South Asia

H1: Tourism development and government effectiveness impact female labor force participation significantly and positively in South Asia.

2. Literature Review

Tourism is considered as a significant contributor to economic growth in South Asia. While countries such as India, Bangladesh, Sri Lanka, Nepal and Pakistan have made advanced strategies of tourism, the gender equality measures in this sector are uneven. A majority of studies in literature over 2020 to 2024 period have investigated this relationship using different methodological methods, including mixed methods analysis, qualitative research, and latest panel data models. The purpose of this review is to synthesize the key findings, by taking analytical techniques, data types and findings into consideration provided by the existing studies.

Kuldasheva & Ahmad analyze the impact of female labor force participation on economic growth in Central Asian economies over the period 1995–2022, both at the aggregate level and across key sectors agriculture, industry, and services—while addressing econometric issues such as endogeneity and reverse causality using advanced panel techniques like system GMM. The findings indicate that overall female labor force participation positively contributes to economic growth, whereas corruption exerts a negative effect. Talking about different sectors, participation of female labour force in services and agriculture significantly increases while participation in the industrial sector decreases economic growth. These results suggest the importance of designing targeted, sector-specific policies to maximize the economic benefits of female employment.

Similarly, Noreen et al. (2025) evaluates the usefulness of the Hausman test in selecting between fixed and random effects models while examining how tourism, globalization, economic growth, and energy consumption affect environmental quality. Although the Hausman test suggests a fixed effects model, the results indicate that a random effects model better reflects real-world conditions. The study concludes that economic growth, energy use, and globalization negatively impact environmental quality.

Moreover, Ali & Perveen (2024) qualitatively analyzed the gender inclusion in tourism in South Asia. According to their study, most of the tourism policies do not report the present and coming different requirements of females across different stages of life. The findings of the study recommended a life cycle method for strategic policies and suggested that this sector must be integrated with labor, health and education sectors for long run authorization.

Additionally, Malik & Jayaraman (2024) examined the disadvantages confronted by minority women in tribal and border regions of India using qualitative research method. Data was collected by community engagement and field interviews. According to the study outcomes, the women in India faced several exclusions including the exclusion from employment in tourism and decision making processes. These results emphasized the importance of heritage based tourism and governance to augment cultural preservation and tourism inclusion.

In addition to this, by conducting the qualitative program evaluation method, Sharma & Rathore (2023) analyzed the effectiveness of Skill India Mission and India's Hunar Se Rozgar initiatives by collecting data from the policy makers and participants through interviews and review of the exiting literature. The results indicated that due to the persistence of gender biases and absence of structural reforms in tourism industry, formal employment outcomes remained limited despite the improvements in technical training for women. These outcomes underscored that informal labor should be formalized so that access to social protections is ensured.

Furthermore, Khan et al. (2023) expanded the policy content analysis of tourism investments in China-Pakistan Economic Corridor (CPEC). According to them, the strategic planning documents did not take gender into consideration. Their findings helped in identifying the systemic gaps in the planning of tourism infrastructure and also recommended the necessary gender impact assessments as well as the formation of inclusive advisory boards to augment impartiality in tourism infrastructure planning.

Similarly, Azizi & Parchekani (2022) examined the effect of women empowerment on the development of ecotourism and cultural tourism in Iran. The main objective of the study was to investigate the role of traditional clothes such as traditional attire worn by Iranian ethnic groups in the tourism business and tourist attraction by using the descriptive analytical survey method. The research hypothesis postulated a positive correlation between traditional Iranian clothing and various dimensions of cultural tourism. It became apparent that the traditional clothing of Iranian ethnic groups played a pivotal role in shaping cultural identity in five key areas: enhancing cultural relations, fostering international tourism collaboration, facilitating the introduction and dissemination of traditional clothing, and promoting indigenous culture. These facets confirmed that traditional clothing is one of the most significant cultural attractions in cultural tourism industry of Iran.

Likewise, Elshaer et al. (2021) analyzed the role of women empowerment in sustainable tourism development (STD) in the Kingdom of Saudi Arabia as women empowerment is taken as a top priority in accordance with the objectives of the Saudi Vision 2030. Regardless of these initiatives, women continued to be considerably underrepresented and excluded in the tourism industry. However, it was agreed that tourism sector can play a powerful role in ensuring gender equality if women empowerment was integrated into the tourism execution and planning processes. The study analyzed both direct and indirect impact of women empowerment in STD across political, social and psychological aspects. For this purpose, data was collected by surveying 1000 women working in the Saudi Arabian tourism sector and analyzed using Structural Equation Modelling (SEM) with SPSS and AMOS. According to the findings of the study, there was a partial mediation impact between political and psychological empowerment and STD. A complete mediating effect of tourist involvement in the relationship between social empowerment and the growth of STD was observed. Overall, the findings of the study underscored the significance of women empowerment in achieving gender equality in tourism sector and STD in Saudi Arabia.

Also, Abou Shouk et al. (2021) analyzed the effect of women empowerment on tourism growth in Oman, Egypt and the United Arab Emirates in accordance with the fifth Sustainable Development Goal (SGD) which emphasizes gender equality and women empowerment. Data were collected from 784 respondents across the selected countries and analyzed using the partial least squares structural equation modelling to identify the key predictors of women empowerment. The outcomes of the study indicated that there was great variation in the impact of women empowerment in tourism growth across the selected countries. The greatest benefit of women empowerment in tourism growth was achieved in the United Arab Emirates followed by Oman and Egypt. These outcomes provide significant implications for the women empowerment and promotion of tourism growth in Arab countries.

Furthermore, considering 21 APEC countries, Hutchings et al (2020) analyzed the segregation of women's work in tourism industry. The study conducted an international survey and got 363 responses. Results revealed that women got employment in tourism sector but not considered well in management roles. Study also highlighted the national

and cultural barriers which women face in tourism industry. An effective role of government and human resource management policies and plans are also discussed in the study to provide equal employment opportunities to women.

Likewise, Voumik et al. (2022) analyzed quantitative panel data from 32 Asian nations from the years 2000 to 2020. They employed Generalized Method of Moments (GMM) estimates and quantile regression methods to examine the nexus between the growth of tourism and women's employment. Before employing regression analysis, unit root tests such as Im-Pesaran-Shin and Levin-Lin-Chu tests were applied to check for data stationarity. Co-integration tests were also run to verify long-run equilibrium relations. The results indicated that tourism had a positive impact on women employment in industrial and services sectors but had a negative impact on their participation in agriculture. Foreign direct investment and export growth also promoted women employment, while remittances and government expenditure had a negative impact. The econometric sensitivity of this research provides key policy recommendations for South Asian economies in the process of moving from agrarian to service-oriented tourism industries.

In the same way, Kumar & Chhetri (2021) studied the role of women in tourism industry in Bangladesh and Nepal by collecting data from household surveys and interviewing stakeholders. Employing mixed-method analysis, the study identified that microfinance schemes supported women's entry into tourism; however the long run sustainability was constrained due to lack of market access, insufficient training and misalignment between tourism and financial policies. An integrated support system is required on the basis of this qualitative evidence.

Furthermore, Bashir et al. (2021) analyzed the role of gender dynamics in tourism sector of Pakistan using field surveys and policy analysis. According to the results policy inactions and cultural norms reduced female participation despite of their potential and interest. The results of the study emphasized the need of favorable action programs and establishment of localized support networks.

Similarly, Sultana & Das (2020) conducted a qualitative policy review to assess gender mainstreaming attempts in tourism policies in South Asia tourism. Their analysis indicated that governments only made verbal pledges towards gender inclusion, and did not support it by structural measures like monitoring systems, gender budgeting or enforcement guidelines. The study concluded that quantifiable timelines, goals and monitoring by autonomous institutions are required for the practical implementation of these policies.

In addition, Fernando & Perera (2020) studied the Sri Lanka's post-conflict tourism economy using qualitative analysis. The finding of the study indicated that there were more women-owned micro-enterprises in ecotourism and community based tourism. However, macro level policy concentrated on the investment in large scale tourism at the costs of grass root initiatives. The findings suggested the technical training, subsidies targeting and supply chain inclusion of women-owned enterprises.

Similarly, Nassani et al. (2019) focused on goal 5 which was important for women empowerment and gender equality under the UN Agenda. It was emphasized that it had been difficult to achieve gender parity in primary education which is a crucial step towards equality. This problem not only interfered with fundamental human rights but also with the basis for world peace and development. The study looked at how, between 1990 and 2015, the international tourism growth may significantly contribute to the empowerment of women, notably in 24 European nations. Conclusions showed that financial intermediaries have made a substantial contribution to women's empowerment through foreign travel. In particular, the study found that financial and tourist factors have aided in achieving gender parity in tertiary enrollment, female employment, and women's participation in non-agricultural wage jobs. The study also provided evidence in favor of the theories linking women's empowerment to growth-led tourism, finance-led growth, and growth stimulation. These results highlighted that tourism and financial intermediaries promote women's empowerment.

2.1 Research Gap

Although several studies have examined gender disparities in the labor market or the growth of tourism in South Asia, very few have integrated both tourism development and government effectiveness to explore their combined impact on labor force participation of females. Most of the existing research is either qualitative in nature or focused on individual countries. Additionally, studies that do employ quantitative methods rarely address the institutional dimensions such as governance quality. There is, therefore, a significant gap in empirical research that applies panel data econometric techniques to assess how tourism and governance influence women's employment outcomes in the South Asian context. This study fills that gap by using a multi-country dataset and a robust panel estimation technique (FGLS) to provide evidence-based insights into this important development issue.

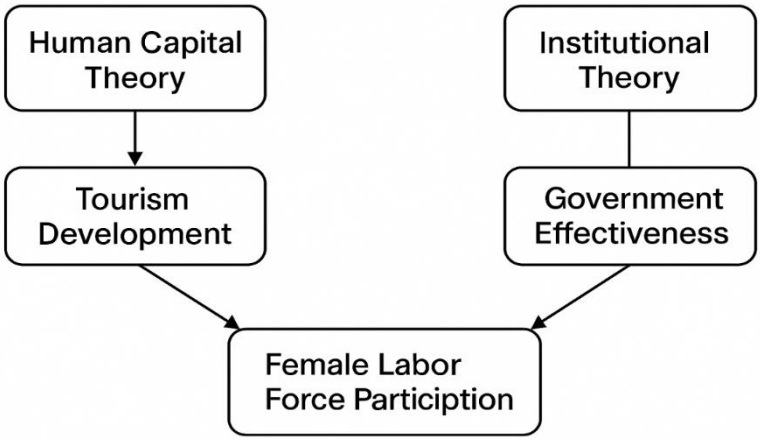
3. Methodology and Data

3.1 Theoretical Framework

The current study builds its framework by combining insights from human capital theory and institutional theory to explain female labor force participation. Human capital theory states that people are more likely to participate in economic activities if they have the necessary skills, education and training. In this context, the development of tourism is an important avenue for employment generation, especially for women, because of the variety of employment opportunities it can provide to a range of skills. With the growth of tourism, it brings labor demand and also promotes the learning of skills, which helps women to enter the labor market.

Governance structures, meanwhile, are relevant in the institutional theory of labor market outcomes. The ability of the government to deliver quality policy, institutions and public services is important in facilitating the participation of women. Good governance can help to address structural barriers through the creation of safer work environments, implementation of equal opportunity legislation and better access to education and employment.

The framework thus makes it an assumption that the development of tourism positively affects the participation of women in the labor force. But this relationship is not in isolation, but reinforced in the case of effective governance. In other words, the more effective the government is, the more it directly affects the percentage of women in the labor force, and the more it can improve the capacity of the tourism sector to provide women with jobs. This integrated approach enables the model to be coherent in terms of economic and institutional drivers.



Source: author compilation

3.2. Data and Data Source

We collected data from the World Development Indicator (WDI, 2024). It is a panel data covering the period from 2000 to 2024 for eight south Asian countries. Data on Female Labor Force Participation, Government Effectiveness, Female Population, Industrial Value Added, GDP Growth, and International Tourism Receipts are collected from the World Development Indicators 2024.

3.3. Variables Description

Table 1. Variables Description

Variables	Abbreviation	Measurement Units
Rate of Female Labor Force Participation	LFPR	Percentage of female population ages 15 plus (modeled ILO estimate)
Government Effectiveness	GE	Estimate (Index Score)
Female Population	FP	% of total population
Industry value added (including construction)	Industry	% of GDP
GDP Growth (annual percentage)	GDP	Annual %
International Tourism Receipts	ITR	% of total exports

Source: Authors' compilation

3.4 Model Specification

To analyze the impact of tourism development and government effectiveness on participation of females in labor force in South Asian countries, the following model is specified:

In econometric terms:

$$LFPRit=\beta_0+\beta_1 \cdot ITR_{it}+\beta_2 \cdot GE_{it}+\beta_3 \cdot PF_{it}+\beta_4 \cdot Ind_{it}+\beta_5 \cdot GDP_{it}+\mu_{it}$$

4. Results and Discussion

4.1 Summary Statistics

International tourism receipts have mean or average of 16.26 with a high standard deviation of 25.08, indicating significant variation across countries or over time. The minimum and maximum values are 0.36 and 85.56, respectively suggesting some countries have very low receipts while others earn substantially more. The mean and standard deviation values of female labor force participation rate are 29.16 and 8.36, respectively. The data range is between 5.10 and 44.15 which show notable differences in female labor participation across observations. Next, government effectiveness has a negative value of mean (-0.586) and its values range between -2.17 and 0.87, indicating that many of the countries included in the sample are performing below average in terms of governance. Female population shows a wide range, with an average or mean of about 114 million and a very large standard deviation i.e., 194 million. The minimum value is 134,089 and the maximum value reaches 703 million, indicating vast differences in population sizes among countries.

The values of mean and standard deviation of industrial value added are 22.08 and 7.32, respectively and it ranges from 8.06 to 35.10, suggesting moderate variability in the contribution of industry to the economy. GDP growth has a mean of 5.13% and a standard deviation of 6.32%, ranging from a sharp contraction of -32.91% to a high growth of 37.51%, showing that economic performance varies widely across the sample.

Table 2: Descriptive or Summary Statistics of Variables

Variable	Average/mean	Std Deviation	Minimum	Maximum
ITR	16.26	25.08	0.36	85.56
FLFPR	29.16	8.36	5.10	44.15
GE	-0.586	0.547	-2.17	0.87
FP	1.14	1.948	13.40	70.30
IND	22.08	7.32	8.06	35.10
GDP	5.13	6.32	-32.91	37.51

Source: Authors' compilation

4.2 Correlation

The correlation matrix shows the direction and strength of the linear relationships among the variables. Correlation value ranges from -1 to 1, where 1 indicate a strong positive relationship whereas -1 indicate a negative relationship. The values near 0 indicate either little or no relationship.

Table 3: Correlation Matrix of Variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) LFPR	1.000					
(2) ITR	0.401	1.000				
(3) GE	0.591	0.425	1.000			
(4) FP	0.025	-0.280	0.410	1.000		
(5) Industry	0.229	-0.645	0.077	0.359	1.000	
(6) GDP	0.122	0.056	0.112	0.067	0.036	1.000

Source: Authors' compilation

4.3 Unit Root Test

To observe the non-stationary property of the series, the unit root test has been applied.

- **Testing Procedure**

The equation used is

$$\Delta yit = \alpha + \beta xit + \gamma yit - 1 + \sum_{j=1}^{p} \delta j \Delta yit - j + \mu it$$

Where:

α and β denote constant and the time trend coefficient, γ is the coefficient representing lag of the dependent variable and, u is the error term.

The results of the unit root test indicate that the variables in the study have mixed orders of integration. The female labor force participation rate and population female are non-stationary at level and first difference, but stationary at second difference which indicates that they follow integration of order two i.e., I(2). International tourism receipts, GDP growth, and industrial value are also stationary at the first difference showing that they follow integration of order one i.e., I (1). Government effectiveness is stationary at level, meaning it is integrated of order zero. This combination of variables following different orders of integration implies that the panel data contains a mix of stationary and non-stationary variables, and therefore, appropriate econometric techniques that can handle such mixed integration should be applied in the analysis.

Table 4: Stationarity Decision of Variable

Variables	T-Test	Prob.	Result
LFPR	-1.39282	-2.46551	1(2)
ITR	-5.65110	0.0000	1(1)
GE	-3.59437	0.0002	1(0)
GDP	-4.67894	0.0000	1(1)
IND	-3.69456	0.0001	1(1)
FP	-4.77469	0.0000	1(2)

Source: Authors' compilation

4.4 Cross Section Dependence Test

The calculated value of Breusch–Pagan LM statistic is 261.8454 with prob-value of 0.0000, suggesting that cross-sectional dependence is present in data. Similarly, the Pesaran scaled LM statistic is -31.24891 with a prob-value of 0.000, which also confirms the presence of cross-sectional dependence across the panel units. However, the Pesaran CD statistic is -0.638352 with a Prob-value of 0.5232, suggesting the absence of cross-sectional dependence according to this test. Despite the CD test being insignificant, the results of the Breusch–Pagan and scaled LM tests both of which are more appropriate in panels with a smaller number of cross-sections support the existence of cross-sectional dependence. Therefore, it is appropriate to use estimation techniques that take cross-sectional dependence into consideration, such as Feasible Generalized Least Squares (FGLS) for further analysis.

Table 5: Cross Sectional Dependence Analysis

Test	Statistic	Prob.
Pesaran scaled LM Statistics	-31.24891	0.0000
Breusch Pagan's LM Statistics	261.8454	0.0000
Pesaran CD Statistics	-0.638352	0.5232

Source: Authors' compilation

4.5 Correlogram of Residuals

Results of correlogram are presented below:

Table 6. Autocorrelation Test: Correlogram of Residuals

Lag	Autocorrelation (AC)	Partial Correlation (PAC)	Q-Statistic	Probability
1	0.868	0.868	146.82	0.000
2	0.753	-0.001	257.86	0.000
3	0.637	-0.063	337.91	0.000
4	0.538	-0.008	395.16	0.000
5	0.453	0.002	435.94	0.000
6	0.376	-0.021	464.18	0.000
7	0.332	0.083	486.32	0.000
8	0.288	-0.019	503.08	0.000
9	0.223	-0.122	513.16	0.000
10	0.171	0.01	519.17	0.000
11	0.125	-0.004	522.39	0.000
12	0.082	-0.033	523.77	0.000

Source: Authors' compilation

The autocorrelation test (Correlogram) shows that all lags have significant autocorrelation (p-values = 0.000), indicating the presence of serial correlation in error term. This justifies the use of FGLS estimation, which corrects for autocorrelation and provides efficient results.

4.6 Panel Cross section Heteroskedasticity LR Test

Results of panel cross section heteroskedascity are presented below:

Table 7. Panel Cross section Heteroskedasticity LR Test

Test Type	Statistic	Degrees of Freedom (df)	p-Value	Conclusion
Likelihood Ratio Test	63.34	8	0.0000	Heteroskedasticity Present

Source: Authors' compilation

The panel heteroskedasticity test produced a highly significant LR statistic (p = 0.0000), which rejects the null hypothesis of homoscedasticity and confirms that heteroskedasticity is present in data. The application of FGLS with cross-section weights was therefore appropriate to address this issue.

4.7 Feasible Generalized Least Square Regression Estimates

The FGLS (Feasible Generalized Least Squares) regression results in Table 5 show how each independent variable affects the dependent variable, which is likely female labor force participation. International tourism receipts have a statistically significant and positive effect, having a coefficient of 0.068 and a Prob-value of 0.000. This means that a rise in tourism receipts is positively related with higher female labor force participation, and the relationship is highly significant. Government effectiveness also has a significant and positive impact (coefficient 0.670, p-value 0.018), suggesting that better governance supports greater participation of women in the labor market. Female population has a coefficient close to zero and a very high p-value (0.956), indicating no meaningful or statistically significant relationship with the dependent variable. Industrial value also shows a positive but insignificant relationship (coefficient 0.029, p-value 0.505), suggesting that changes in industrial activity do not significantly influence female labor force participation in this model. GDP growth has a small positive coefficient (0.006) with a

Prob-value of 0.024, indicating a weak but statistically significant relationship. This suggests that higher economic growth is slightly related with increased female labor force participation. The statistically significant constant term is showing the predicted value of the dependent variable when all independent variables are zero.
In short, tourism receipts, GDP growth and government effectiveness have significant positive impact and industrialization and female population have insignificant effect on female labour force participation.

Table 8: Feasible Generalized Least Square Regression Estimates

Variable	Coefficient	Std. Error	T-Value	P-Value
ITR	0.068	0.012	5.55	0.000
GE	0.670	0.284	2.36	0.018
FP	0.000	0.000	0.06	0.956
IND	0.029	0.044	0.67	0.505
GDP	0.006	0.005	1.17	0.024
Constant	29.136	1.209	24.10	0.000

*Where, *** p<.01, ** p<.05, * p<.1.00* Source: Authors' compilation.

5. Summary and Conclusion

This study examined the role of tourism development and government effectiveness in shaping female labor force participation across eight South Asian economies. The FGLS results indicate that international tourism receipts, government effectiveness, and economic growth significantly enhance women's participation in the labor market, whereas industrial value added and female population do not show a statistically meaningful effect.
These findings are broadly in line with earlier studies (Noreen, et al. 2025; Kuldasheva & Ahmed, 2025; Mahwish et al. 2024; Khan et al.2024) that identify tourism as a labor intensive sector with relatively low entry barriers for women, particularly in developing economies. Existing research has often emphasized that tourism generates diverse employment opportunities which can accommodate varying skill levels. The positive association found in this study reinforces this view and suggests that, in the South Asian context, tourism continues to act as an important channel for women's economic inclusion. Similarly, the significant role of government effectiveness supports prior literature highlighting that institutional quality through better policy implementation, regulatory enforcement, and public service delivery facilitates greater access to labor markets for women.

At the same time, the results also offer some contrasts with parts of the literature. For instance, the insignificant effect of industrial value added differs from studies that view industrialization as a key driver of female employment (Kabeer et al. 2018). One possible explanation is that, in many South Asian economies, the industrial sector remains male dominated and often characterized by rigid working conditions, limited flexibility, and skill mismatches, which may restrict women entry. In contrast, service-oriented sectors such as tourism tend to provide more adaptable roles and lower entry constraints (Duman, 2022; Kuldasheva & Ahmad, 2025).

Overall, the findings confirm that both sectoral dynamics and institutional quality matter, but their effects are not uniform across sectors. The study extends existing literature by jointly examining tourism and governance within a single empirical framework, showing that their combined influence is particularly relevant for enhancing female labor force participation in South Asia. This integrated perspective helps explain why some economies perform better than others in terms of women's economic engagement, even when demographic conditions appear similar.

6. Policy Recommendation

Based on the findings of the study, different policies are recommended to increase female labor force participation. These policies recommend to

- Develop women centered tourism policies to extend job access in tourism and related services.
- Improve institutional performance to ensure fair enforcement of labor laws and reduce barriers to women's employment.
- Expand practical training and skill programs aligned with tourism and service-sector needs.
- Establish safe and flexible workplaces to support women's entry and retention in jobs.

- Increase access to digital and financial services to support women's entrepreneurship and remote work.
- Promote regional collaboration to exchange effective strategies for women's economic inclusion.

7. Future Directions

Future research might consider the relationship between the interaction of social norms, household structure, and technology adoption together with tourism and governance that influence the employment outcomes of women. The inclusion of better data, particularly subsector level data within the tourism sector, will be helpful to know which sectors create most employment opportunities for women. Furthermore, research using firm level data or household level data can give us an idea of how decision-making processes affect women.

8. Data limitations

The study has certain data limitations. It does not use primary panel data, which can contain gaps in data, inconsistencies of reporting, and inconsistencies in measurement across countries. Data disaggregated to the sector level is not always completely available, which may restrict the extent of analysis. Government effectiveness indicators are based on composite measures and do not reflect all the aspects of institutional quality. Furthermore, the data may not necessarily be a true reflection of structural or policy changes in recent times, and these should be taken into account when interpreting the results.

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