International Journal of Scientific Engineering and Science
Volume 8, Issue 7, pp. 123-129, 2024. ISSN (Online): 2456-7361

Tourism, Poverty and Inequality in Selected MENA Countries: A Panel Data Analysis

Jihène KHALIFA
Faculty of Economics and Management of Sousse, University of Sousse, TUNISIA
Email address: jihene.khalifa@yahoo.fr

Abstract**—** *Tourism is a crucial industry for many developing countries, serving as a catalyst for socioeconomic development. It has the potential to generate positive externalities that enhance the efficiency and productivity of the host nation. In this paper, we inspect the effect of tourism at the Human Development Index and profits inequality withinside the MENA region. By analyzing panel data from 21 countries in the MENA region spanning the period from 1995 to 2015, we explore the relationship between tourism development, poverty reduction, and inequality. Our empirical findings highlight the significance of the tourism sector in raising the living standards of the local population, albeit with the downside of increasing income inequality.*

Keywords**—** *Tourism, Employment, Poverty, Income Inequality, Random Effects, Fixed Effects.*

I. INTRODUCTION

In recent decades, tourism has become a major force driving economic growth in developing countries, contributing significantly to foreign exchange earnings, international investment, tax revenues, and job creation. The tourism sector is a crucial driver of growth and prosperity, playing a key role in poverty reduction, particularly in developing nations. The adoption of tourism as a development strategy in these countries stems from a neoliberal approach encouraged by the World Bank and the International Monetary Fund (Brown, 1998). Rogerson (2002) noted that tourism's contribution to the gross domestic product (GDP) positioned it as a key economic development strategy for South Africa. In response to the challenge of poverty, the United Nations World Tourism Organization (UNWTO) launched the Sustainable Tourism - Eradicate Poverty (ST-EP) initiative, aiming to promote poverty alleviation through sustainable tourism development projects. Croes and Vanegas (2008) highlighted that developing countries view tourism as one of the most important economic sectors. Hawkins and Mann (2007) reported that around 80% of developing countries experiencing poverty reduction recognize tourism as a catalyst for this improvement. This paper aims to examine the link between tourism and poverty reduction in the MENA region, where reducing poverty is a primary goal for governments.

1. Tourism, employment and poverty nexus

The tourism sector has a high potential to generate jobs, especially for semi-skilled workers, and offers opportunities for the poor or small businesses to engage in direct sales of goods and services to visitors. Additionally, tourism-driven investments in infrastructure, utilities, and transport networks can benefit the local poor directly or indirectly. According to Goldin (2010), young people under the age of 25 make up half of all tourism-related jobs. In developing countries, most workers are employed informally and lack access to comprehensive social security systems. This high rate of informal employment results in limited tax revenue and insufficient resources to address critical social issues like healthcare and unemployment protection. Employment in the formal sector often comes with low pay, high risk, and job insecurity. Nevertheless, employment plays a crucial role in reducing poverty and improving living conditions for the poor. Tourism is a labor-intensive industry and a significant source of employment. Job creation is one of the most critical tourism activities in many developing countries, particularly in the MENA region, where unemployment is a significant socio-economic challenge. Tourism development creates jobs at all skill levels across various sectors, including hospitality, transportation (especially air transport), telecommunications, financial services, trade, agriculture, crafts, and industry. The tourism sector's contribution to foreign currency reserves helps balance trade and establishes it as a major employer. The impact of tourism on employment depends largely on the level of tourist spending. The International Labour Organization reports that one job in tourism can create approximately 1.5 additional jobs indirectly within the sector. Consequently, the tourism sector is projected to generate over 230 million direct and indirect jobs, accounting for about 6% to 7% of the global workforce. Nearly half of these jobs are held by individuals under 25, and up to 70% by women (WDI,2020). Tourism is becoming a vital source of growth and employment in many MENA countries, including rural areas and for groups with limited access to the labor market, such as women, young people, and migrants. The tourism sector not only creates jobs but also stimulates infrastructure development, business creation, and encourages local populations to acquire new skills, such as foreign languages. The most immediate benefit of tourism is the potential to improve the standard of living in a region or country by increasing income and creating jobs (De Kadt and Emanuel, 1979).

2. Tourism and regional inequality nexus

Neoclassical theory suggests that inequalities within and between countries are temporary and will diminish as countries achieve certain levels of economic growth. However, the primary causes of rising income inequality are internal, such as limited access to education and imperfect labor markets. Despite the significance of these issues, income

inequality is often not addressed with the seriousness it deserves. To promote sustainable development, governments must implement policies to reduce both poverty and inequality. Inequality can be tackled in two ways:

- Through taxation or the redistribution of existing wealth, along with specific benefits for households and groups in difficulty.
- By supporting the production of new wealth that aligns economic objectives (such as supporting local economies) with social objectives (like job creation and the establishment of new local services).

Tourism growth has the potential to reduce disparities between developed and underdeveloped regions within a country, making it a valuable tool for promoting more balanced regional development. Tourism has been a substantial issue in decreasing nearby and sophistication disparities (Tosun, 2002). However, the limited literature on this subject presents two contrasting views. On one hand, tourism can reduce inequalities between regions by channeling tourist attraction surplus to poorer, underdeveloped areas. On the other hand, tourism can exacerbate regional inequality, as some central regions rich in tourism resources receive more investment, leaving peripheral areas behind. Krakover (2004) argues that the relationship between tourism and regional inequality is country-specific and influenced by various factors. Göymen (2000) and Seckelmann (2002) suggest that in Turkey, international tourism development has widened inequalities, as more developed coastal locations attract more investment and higher policy support, leading to faster growth in these areas. Similarly, in Greece, increased funding to economically developed regions have widened regional gaps (Liargovas, Giannias, and Kostandopoulos, 2007). In many countries, domestic tourism has greater potential to reduce disparities in less developed economies (Massidda and Etzo, 2012).

The structure of the remaining sections is as follows: Section 2: Literature review; Section 3: Data, econometric methodology, results and discussion, including a summary of the econometric study's findings; Section 4: Conclusion.

II. Literature Review

Developing countries have increasingly recognized tourism as a crucial component of their economic growth and development strategies, given its contributions to improved financial resources, job creation, and poverty reduction (Sinclair, 1998; Dieke, 2004).

Wen and Tisdell (1997) conducted one of the pioneering studies on this topic, empirically examining the impact of tourism on income inequality in China. Their analysis of tourism demand and supply side indicators revealed that tourism increases regional inequality between different regions in China. Similarly, Scheyvens and Momsen (2008) investigated the role of tourism in economic growth, poverty reduction, and income inequality in certain small island developing states (SIDS). Despite tourism's significant contribution to economic development, their study argues that it does not significantly influence poverty reduction in the selected countries, and in some cases, it even increases income inequality. Jiang, DeLacy, Mkiramweni, and Harrison (2011) found that states with higher tourism intensity enjoy a higher standard of living, with a higher Human Development Index (HDI) and lower infant mortality rates. Holden, Sonne, and Novelli (2011) explored the effect of tourism at the human beings of Elmina, Ghana, displaying that at the same time as tourism has the capacity to lessen poverty, significant barriers to entrepreneurship development and employment still exist. Job and Paesler (2013) analyzed nature-based tourism and living standards on Wasini Island, Kenya, concluding that increased income from tourism can improve the living conditions of the poor. Truong, Hall, and Garry (2014) examined whether tourism significantly impacts poverty reduction among the poor in Sapa, Vietnam. Their study, which included semi-structured interviews with local residents and key stakeholders, suggested that while tourism contributes to poverty reduction for the poor in Sapa, the primary beneficiaries are the non-poor and tour operators. Incera and Fernández (2015) investigated the impact of inbound tourism on income distribution in the developed regional economy of Galicia, Spain, using the accounting matrix model (SAM) for the year 2008. They found that high-income households benefit more from tourism than low-income households, leading to a slight increase in income inequality in Galicia. Li, Goh, Zhang Qiu, and Meng (2015) determined that tourism has a greater wonderful effect in Inland areas (much less evolved regions) than in coastal areas (evolved regions), suggesting that tourism-induced growth can reduce regional inequality in China. Similarly, Li, Chen, Li, and Goh (2016) showed that tourism can reduce regional inequality in China, and that domestic tourism has a more significant impact than international tourism in achieving this reduction.

The following table summarizes the results found by some of these authors:

TABLE 1: The relationship between tourism, economic growth and poverty

Authors	Findings
Chattopadhyay, et al. (2021)	Tourism development has a negligible impact on the Human Development Index (HDI).
Khan, et al. (2020)	Tourism is recognized as a key driver of economic development and plays a significant role in reducing poverty in Pakistan.
Rivera (2016)	Tourism does not drive human development; instead, it is human development that fosters the growth of tourism.
Hanitra and Louisa (2016)	The development of tourism and economic growth in Madagascar is failing to alleviate poverty.
Incera and Fermandez (2015)	Tourism is regarded as a tool for creating opportunities and generating widespread employment, benefiting vulnerable groups in society. Additionally, tourism can serve as a means of income redistribution, with governments using new revenue to enhance the welfare of the poor. Tourism disproportionately benefits higher-income households over lower-income ones, contributing to a slight increase in income inequality in Galicia.
Li, et al. (2015)	Tourism has a more pronounced positive effect on economic development in inland areas of China (less developed regions) compared to coastal areas (developed regions). This suggests that tourism-driven growth has the potential to alleviate regional inequalities in China. Moreover, domestic tourism exerts a stronger influence than international tourism in mitigating regional disparities.

Kinyondo and Pelizzo (2015)	Tourism-led growth has not succeeded in reducing income inequality due to three main factors: vertical integration, foreign ownership, and inadequate wages for tourism workers.
Truong, et al. (2014)	Analysis of the study indicates that while tourism contributes to poverty reduction among the poor in Sapa, the primary beneficiaries of local tourism activities are the non-poor and tour operators.
Croes (2014)	Using the Granger causality test, the study's results suggest that tourism plays a role in reducing absolute poverty in developing countries.
Job and Paesler (2013)	Increased income from tourism is elevating living standards on Wasini Island, Kenya.
Gartner and Cukier (2012)	Employment in the tourism sector serves as a significant tool for alleviating poverty and enhancing the living conditions of the poor.
Jian, et al. (2011)	Using the Human Development Index (HDI) and under-five mortality rates as indicators of poverty reduction, the study suggests that states with higher tourism intensity experience a higher standard of living, characterized by higher HDI and lower infant mortality rates.
Holden, et al. (2011)	Tourism holds significant potential to reduce poverty in Elmina, Ghana, yet it faces substantial obstacles hindering the development of entrepreneurship and employment within the sector.
Sharpley and Naidoo (2010)	Tourism can provide short-term economic benefits to the poor in Mauritius, but its long-term contribution to poverty reduction remains limited.
Croes and Vanegas (2008)	Tourism does not directly reduce poverty but rather contributes to economic growth, which in turn affects poverty levels. Tourism plays a positive role in fostering economic growth in Nicaragua.
Hall (2007)	Tourism does not directly reduce poverty but rather contributes to economic growth, which in turn affects poverty levels. Tourism plays a positive role in fostering economic growth in Nicaragua.
Bankimoon (2007)	Tourism, when practiced sustainably, has the potential to contribute to poverty reduction.
Chok, et al. (2007)	There is insufficient evidence to demonstrate that the poor derive significant benefits from tourism.
Tosum et al. (2003)	Tourism has contributed minimally to economic development in Turkey, exacerbating inequality between coastal and rural regions.
Tosun (2002)	Tourism stands as a pivotal component of growth, significantly contributing to narrowing gaps between regions and social classes.

Source: author

III. Empirical Model

Previous economic development studies, such as Gallup et al. (1999) and Sachs (2001), highlight the significance of geographical factors in tourism development. However, the heterogeneity among countries in the MENA region can impact how tourism affects poverty. Factors such as income levels and overall development within a country can significantly alter the relationship between tourism and indicators like poverty or the Human Development Index (HDI).

A. Model specification

Building on previous research (Gulcemal, 2020), we utilize panel data for our analysis, leveraging its advantages over cross-sectional and time-series models. Panel data offers richer information and allows for controlling individual heterogeneity, thereby enhancing the efficiency of econometric estimation. Various synthetic indicators, including those from the Foster et al. (1984) class and non-utilitarian approaches such as human development indices (HDI, GDI, HPI), are commonly employed in poverty analysis literature.

In our estimation procedure, the human development index (HDI) serves as the dependent variable. Independent variables include income inequality, foreign direct investment (FDI) inflows, GDP per capita, tourism receipts, tourist arrivals, and the unemployment rate. Our model aims to assess the impact of tourism receipts on the Human Development Index (HDI), which serves as a proxy for poverty eradication.

The model, estimated using STATA 12 software, is structured as follows for each country (i) at time (t):

$$HDI_{it} = \alpha_1(GDP_{it}) + \alpha_2(RCT_{it}) + \alpha_3(NBARR_{it}) + \alpha_4(GINI_{it}) + \alpha_5(FDI_{it}) + \alpha_6(POP_{it}) + \alpha_7(UNMP_{it}) + \varepsilon_{it}$$

With (HDI): Human development index; (GDP): gross domestic product per capita; (RCT): tourism receipts; (NBARR): number of tourist arrivals; (GINI): GINI index; (FDI): foreign direct investment; (POP): population; (UNMP): unemployment rate; ε: error term.

Before proceeding with model estimation, we will assess the heterogeneity within our sample. Econometrically, this involves testing the equality of coefficients across individuals in the model. Several tests are available to determine whether specific effects exist for each individual:

- To assess the presence of individual effects in our estimates, we employ the Fischer test.
- For comparing the relevance of constant outcomes as opposed to random outcomes, we use the Lagrange multiplier test (Breusch and Pagan, 1980).
- To decide between a model with fixed effects or random effects, we apply the Hausman test (1978).

B. Data and Main Findings:

French Our sample consists of 21 countries from the MENA region observed between 1995 and 2015, including Tunisia, Algeria, Egypt, Morocco, Saudi Arabia, Bahrain, Jordan, Djibouti, United Arab Emirates, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Yemen, Syria, Qatar, and Oman. Data come from the World Development Indicators (WDI) database of the World Bank, the World Tourism Organization (UN WTO), the Standardized World Income Inequality Database (SWIID), and the World Travel and Tourism Council (WTTC). Tables 2 and 3 present descriptive statistics and Pearson correlation coefficients for the variables in our analysis. The data reveal that the human development index in our sample ranges from 0.35 to 0.89. Table 2 reports the means and standard deviations of the other variables.

TABLE 2: The descriptive statistics

Variable	Mean	Std.Dev	Min	Max
HDI	0.701	0.119	0.351	0.899
LRCT	20.508	1.923	13.815	28.101
LNBARR	3046786	3656735	15000	1.93e+07
LGDP	1565257	18390.66	774.45	83672.62
GINI	38.776	7.941	21.7	74.4
FDI	6.871	34.807	-10.614	451.715
UNMP	10.892	6.703	0.164	30.68
LPOP	1.67e+07	2.12e+07	377419	9.15e+07

Source: author`s estimates

International Journal of Scientific Engineering and Science
Volume 8, Issue 7, pp. 123-129, 2024. ISSN (Online): 2456-7361

Additionally, there is a positive correlation between the human development index and tourism variables, indicating that tourism contributes to poverty reduction and improved well-being. Consistent with expectations, a country's income level (GDPPC) and foreign direct investment also show positive associations with the human development index. Conversely, population size, the GINI index, and the unemployment rate exhibit negative correlation coefficients with the human development index.

Table 3 displays the correlation matrix among the variables utilized in our empirical analysis. It highlights a negative correlation between tourism development indicators and poverty, alongside a positive correlation between tourism development indicators and the human development index.

TABLE 3: Auto-correlation matrix

	HDI	LRCT	LNBARR	LGDP	LPOP	GINI	FDI	UNMP
HDI	1							
LRCT	0.56	1						
LNBARR	0.47	0.85	1					
LGDP	0.84	0.32	0.23	1				
LPOP	-0.23	0.28	0.34	-0.42	1			
GINI	-0.03	-0.18	-0.19	0.07	-0.00	1		
FDI	0.12	0.03	0.01	0.09	-0.25	-0.18	1.	
UNMP	-0.36	-0.3	-0.25	-0.55	0.37	0.03	-0.09	1

Source: author`s estimates

Table 4 presents the estimation results for the determinants of poverty in MENA countries. Columns 1 to 3 depict different specifications of the estimation equation: Column 1 shows the results of ordinary least squares (OLS) estimation. Column 2 introduces fixed effects, absorbing all time-invariant determinants of the human development index and unobserved components not captured in Column 1. Column 3 presents results after addressing autocorrelation and heteroskedasticity issues. We conduct a Hausman specification test, and the null hypothesis favoring the consistency and efficiency of the random effects model is rejected ($p < 0.05$). Therefore, Column 2's fixed effects model is preferred over the random effects model, as it provides consistent estimators. Consequently, we adopt the fixed effects model as our primary specification.

In Columns 1 and 3, coefficients on tourism receipts are positive and statistically significant. However, coefficients on other factors, such as foreign direct investment, are statistically insignificant but exhibit the expected positive effect on the human development index. In Column 2, the fixed effects reveal a positive but statistically insignificant coefficient for tourism. This suggests that while increased total tourism expenditure correlates with improved well-being and reduced poverty, the direct effect of tourism on poverty reduction is not statistically significant. The marginal effect of tourism on the Human Development Index in Column 3 is expressed as follows:

TABLE 4: The impact of international tourism on the human development index

	OLS	Fixed Effect	FGLS regression
LRCT	0.017***	0.023***	0.003***
LNBARR	0.011***	0.008***	0.004***
LGDP	0.079***	0.113***	0.079***
LPOP	-0.009***	0.048***	0.007***
GNI	-0.000	-0.000	-0.000**
FDI	0.000	0.000	4.49e-06
UNMP	0.004***	-0.000*	0.000***
Constant	-0.431***	-1.226***	-0.253***
Number of observations	412	412	
Fisher	262.75***	123.68***	
Wald			765.50***
R2	0.839		
Hausman Prob >chi2		0.021 Preferred Fixed Effect	

Source: author`s estimates

These estimates indicate that the logarithmic effect of tourism receipts on the human development index can be positive. Tourism thus contributes to improving well-being and reducing poverty. Furthermore, the effect of tourism on poverty reduction is more pronounced in countries with low per capita income. Both the OLS and FGLS methods show that tourism receipts positively and significantly impact well-being, whereas in the fixed effects model, they are not significant. Nonetheless, the number of tourist arrivals and GDP per capita are positive and significant across all estimation methods. Specifically, a 1% increase in tourism receipts leads to a 0.02% increase in the human development index. This finding aligns with Jiang, et al. (2011), who found that states with higher tourism intensity enjoy higher standards of living, with a higher HDI and lower infant mortality.

TABLE 5: The impact of international tourism on the GINI index

	OLS	Fixed Effect	GLS estimation
LRCT	-0.800**	-0.55	-1.15***
LNBARR	-0.72*	2.26**	-.3263
LPOP	0.814**	-11.613***	0.751*
LGDP	1.653***	1.760	1.118***
FDI	-0.034***	-0.003	-0.010
UNMP	-0.011	-0.085	0.052
Constant	37.704***	186.013***	43.859***
Number of observations	420	420	420
Fisher	9.88***	7.74***	
Wald			55.35***
R2	0.112	0.000	
Hausman Prob >chi2		0.029 Preferred Fixed Effect	

Source: author`s estimates

From an economic policy perspective, the results highlight the importance of sustaining tourism growth to promote employment among disadvantaged populations. This involves encouraging the tourism sector by enabling local production, especially from the poorest populations, to supply tourism businesses with products and services. Additionally, implementing tax incentives to encourage labor-intensive tourism activities is crucial. The results also show that a

decrease in the GINI index correlates with an improvement in the human development index. Conversely, an increase in the GINI index likely worsens the living conditions of the poor. Therefore, economic policies should aim for balanced growth and income distribution to reduce the risk of crises and accelerate macroeconomic stabilization. Moreover, the unemployment rate variable is significant and negative in the fixed-effects model, indicating that an increase in unemployment exacerbates poverty in MENA countries.

According to both the OLS and FGLS methods, the effect of the two tourism variables on inequality in the MENA region is significantly negative. However, there is little statistical evidence of a correlation between tourism variables and the Gini index. The results of this analysis suggest that international tourism contributes to reducing income inequalities in MENA countries, confirming Proenca and Sukiazis (2008) findings, which showed international tourism significantly reduces regional disparities in Spain, Italy, Greece, and Portugal. For instance, Li, et al. (2015) found that tourism has a more positive impact in Inland (less developed) areas than in coastal (developed) regions of China. Conversely, Wattanakuljarus and Coschead (2008) found that despite Thailand's thriving tourism industry, the overall increase in family incomes may worsen income distribution. Similarly, Goymen (2000) and Seckelmann (2002) noted that developed and coastal locations receive more tourism-related investment, exacerbating regional inequalities. Lee (2009) and Lee and O'Leary (2008) revealed that tourism-dependent states have higher income inequality than those less reliant on tourism. Incera and Fernandez (2015) find that high-income households benefit more from tourism than low-income households, concluding that domestic tourism slightly increases income inequality in Galicia. Kinvon Do and Pelizzo (2015) suggested that tourism growth might not reduce income inequality in Tanzania.

TABLE 6: The impact of international tourism on the unemployment rate

	OLS	**Fixed Effect**	**GLS estimation**
LRCT	-0.128***	-0.108***	-0.032**
LNBARR	-0.144***	0.101**	-0.097***
LPOP	0.302***	-0.429***	0.166***
LGDP	-0.725***	-0.992***	-0.540***
LFDI	0.058***	0.041***	0.000
LLIFEXP	3.132**	-4.458***	4.615***
LACCELEC	0.721**	-0.906**	0.345***
LINFMORRT	-0.515***	-0.937***	-0.013
Constant	-6.767	44.347***	-14.953***
Number of observations	383	383	383
Fisher	70.75***	11.02***	
Wald			194.53***
R2	0.602	0.064	
Hausman Prob >chi2		(0.000) *** Preferred Fixed Effect	

Source: author`s estimates

The institutional characteristics of countries play a crucial role in understanding income inequality levels. States can influence income distribution by restricting or extending democratic rights. The effect of economic growth on income inequality is not significant in the fixed effects estimation, aligning with economic literature that this relationship cannot be assumed. These findings are consistent with Robert Barro's (2000) conclusion that economic growth is not a significant determinant of inequality levels in developing countries.

With LIFEXP: the life expectancy; ACCELEC: the access to electricity; INFMORRT: the infant mortality rate The regression results on the impact of international tourism on the unemployment rate show that both measures of tourism development (tourism receipts and the number of arrivals) have a negative and significant effect regardless of the estimation method used. This indicates that international tourism positively contributes to reducing the unemployment rate. These findings align with Sinclair (1998), who highlighted the crucial role of the tourism sector in job creation by generating income for residents and the government. Additionally, Ashley et al. (2000) argue that tourism can aid poverty reduction by providing employment opportunities for economically vulnerable groups through the production of tourism goods and services. Similarly, Croes and Vanegas (2008), Durbarry (2002), Hazari and Sgro (1995), Kim et al. (2006), and Sugivarto et al. (2003) suggested vast will increase in employment, own circle of relatives income, and financial increase due to tourism-generated income. However, these findings contradict Saayman et al. (2012), who found that an increase in tourism leads to a higher unemployment rate. The current results underscore the importance of maintaining sustained and sustainable tourism growth to promote employment among disadvantaged populations. It is essential to develop the resources of small tourism companies by identifying specific areas where tourism micro-enterprises can thrive, which would enhance the productivity of the sector and reduce its dependence on demand fluctuations. Furthermore, establishing tourism projects based on local resources and improving labor market functions and human resources development policies are crucial for sustaining growth and employment.

V. CONCLUSION

This paper examines the capacity of tourism to reduce poverty and improve well-being in the MENA region, and explores whether a country's level of economic development influences tourism's impact on poverty reduction. Few researchers have studied the macroeconomic impact of tourism on poverty reduction, making this investigation particularly relevant. The study provides guidelines for national policies to enhance tourism development. Using tourism receipts as a performance indicator and the Human Development Index (HDI) as a proxy for poverty, the results show that both tourism expenditure and the number of tourist arrivals significantly affect poverty reduction in MENA countries. The analysis also explores whether the effect of tourism on the GINI index is influenced by a country's economic situation. By including the unemployment rate, the study finds that economic development level determines tourism's effect on poverty, with tourism significantly affecting the unemployment rate. Log-transformed tourism receipts positively impact the HDI, indicating that tourism

contributes to poverty reduction and economic growth. However, the marginal effect of tourism on poverty reduction varies depending on a country's economic level, suggesting that low-income countries could improve well-being by enhancing their tourism performance. These findings align with Croes (2014), who states that tourism development significantly reduces poverty in less economically developed countries. For example, in Nicaragua, tourism revenues decrease the poverty rate (Croes, 2014; Croes and Vanegas, 2008). Conversely, in more developed countries, tourism does not significantly impact the poor. This study suggests that MENA countries benefit from poverty reduction through tourism, emphasizing the moderating role of a country's economic level in this process.

To achieve pro-poor tourism, policymakers should consider their country's economic status before adopting tourism development policies. Kim (2012) suggests that tourism's competitiveness and its impact on quality of life vary by economic conditions, while Das and DiRienzo (2010) highlight the importance of a country's economic level in facilitating tourism development policies. High-income countries may not benefit from tourism due to increased inequality and unsustainable tourism development. Although GDP growth reflects positive economic changes, it does not directly address income distribution, leading to growing inequality in middle-income countries that hinders tourism's contribution to poverty reduction. Corruption also negatively affects tourism's impact on poverty reduction, as high corruption levels prevent equitable income distribution (Das and DiRienzo, 2010). Policymakers in MENA countries should consider sustainable tourism to ensure equitable distribution of tourism benefits. Tourism's contribution to job creation, poverty eradication, and economic growth depends on:

- Integration of the tourism industry into the national economy.
- Revenue generated by tourism used to finance infrastructure development, support local businesses, and develop skills and institutions for a vibrant local economy.
- Government policies and strategies encouraging domestic and foreign investment in tourism, technology transfer, and labor-intensive activities.
- National efforts to ensure sustainable tourism activities that achieve economic, social, and environmental objectives (UNCTAD, 2013).

Despite recommendations from the World Tourism Organization, many rural areas still do not prioritize this sector.

REFERENCES

[1] C. Ashley, C. Boyd, H. Goodwin, "Pro-Poor Tourism: Putting Poverty at the Heart of the Tourism Agenda," Natural Resource Perspectives, vol. 51, pp.1-6, 2000.
[2] T.S. Breusch, A.R. Pagan, "The Lagrange Multiplier Test and its Applications," The Review of Economic Studies, 1980.
[3] F. Brown, "Tourism reassessed: Blight or blessing. Oxford: Butterworth-Heinemann," 1998.
[4] S. Chok, J. Macbeth, C. Warren, C.M. Hall, "Tourism as a Tool for Poverty Alleviation: A Critical Analysis of "Pro-Poor Tourism" and Implications for Sustainability," Current Issues in Tourism, vol.10, pp.144-165, 2007.
[5] M. Chattopadhyaya, A. Kumar, S. Alic, and S.K. Mitrad, "Human development and tourism growth's relationship across countries: a panel threshold analysis" Journal of sustainable tourism, 2021. https://doi.org/10.1080/09669582.2021.1949017.
[6] R. Croes, "The role of tourism in poverty reduction: An empirical assessment," Tourism Economics, vol. 20, pp.207–226, 2014.
[7] R. Croes, M. Vanegas, "Cointegration and causality between tourism and poverty reduction" Journal of Travel Research, vol.47, pp94-103, 2008.
[8] J. Das, C. Dirienzo, "Tourism competitiveness and corruption: A cross-country analysis," Tourism Economics, vol. 16, pp. 477–492,2010.
[9] E. De Kadt, "Tourism: Passport to Development?," New York, Oxford University Press, 1979.
[10] P.U.C. Dieke, "Tourism in Africa's economic development: policy implication," Management Decision, vol. 41, pp. 287–295, 2004.
[11] R. Durbarry, "The economic contribution of tourism in Mauritius," Annals of Tourism Research, vol. 29, pp. 862–865, 2002.
[12] J. Foster, J. Greer, E. Thorbecke, "A class of decomposable poverty measures," Econometrica, vol. 52, pp.761-766, 1984.
[13] J.L. Gallup, J.D. Sachs, A.D. Mellinger, "Geography and economic development," International Regional Science Review, vol. 22, pp. 179-232, 1999.
[14] C. Gartner, J. Cukier, "Is tourism employment a sufficient mechanism for poverty reduction? A case study from Nkhata Bay, Malawi," Current Issues in Tourism, vol.15, pp. 545-562, 2012.
[15] I. Goldin, "Tourism and the G-20: T. 20 strategic paper," Background Paper, vol.20, 2010.
[16] K. Göymen, " Tourism and governance in Turkey. Annals of Tourism Research," vol.27, pp. 1025-1048, 2000.
[17] T. Gulcemal, "Effect of human development index on GDP for developing countries: a panel data analysis," JEFA, vol. 7; no.4, pp. 338-345, 2020. DOI: 10.17261/Pressacademia.2020.1307.
[18] C.M. Hall, "Pro-poor tourism: do tourism exchanges benefit primarily the countries of the South?," Current Issues in Tourism, vol. 10, pp.111-118, 2007.
[19] R. Hanitra, A. Louisa, "Multivariate Granger Causality among tourism, poverty and growth in Madagascar," Tourism Management Perspectives, 2016.
[20] J.A. Hausman, "Specification tests in econometrics," Econometrica, vol. 46, pp.1251– 1272, 1978.
[21] D. Hawkins, S. Mann, "The World Bank's role in tourism development," Annals of Tourism Research, vol 34, pp.348–363, 2007.
[22] B.R. Hazari, P.M. Sgro, "Tourism and growth in a dynamic model of trade," The Journal of International Trade and Economic Development, vol.4, pp.253-256, 1995.
[23] A. Holden, J. Sonne, M. Novelli, "Tourism and poverty reduction: an interpretation by the poor of Elmina, Ghana," Tourism Planning and Development, vol.8, pp.317–334, 2011.
[24] A. C. Incera, M.F. Fernandez, "Tourism and income distribution: evidence from a developed regional economy," Tourism management, vol.48, pp.11-20, 2015.
[25] M. Jiang, T.DeLacy, N.P.Mkiramweni, D. Harrison, "Some evidence for tourism alleviating poverty," Annals of Tourism Research, 2011.
[26] H. Job, F. Paesler, "Links between nature-based tourism, protected areas, poverty alleviation and crises. The example of Wasini Island (Kenya)," Journal of Outdoor Recreation and Tourism, pp. 18-28, 2013.
[27] H. J. Kim, M.H.Chen, S. C. Jang, "Tourism expansion and economic development: the case of Taiwan," Tourism Management, vol.27, pp.925-93, 2006.
[28] N. Kim, "Tourism destination competitiveness, globalization, and strategic development from a development economics perspective. Ph.D. dissertation, Urbana-Champaign," University of Illinois, 2012.
[29] A. Kinyondo, R. Pelizzo, "Tourism, Development and Inequality: The Case of Tanzania," Poverty & Public Policy (PPP), 2015. Doi/full/10.1002/pop4.92.
[30] Khan, A., Bibi,S., Lorenzo,A., Lyu, J., Babar,Z. (2020). Tourism and Development in Developing Economies: A Policy Implication Perspective. Sustainability, 12, 1618.
[31] S. Krakover, "Tourism development centres versus peripheries: The Israeli experience during the 1990s," International Journal of Tourism Research, vol. 6, pp. 97-111, 2004.
[32] S. Lee, J.T. O'Leary, "Determinants of Income Inequality in U.S. Nonmetropolitan Tourism- and Recreation-Dependent Communities,"

Journal of Travel Research, 2008. https://doi.org/10.1177/0047287507312425.
[33] C.C. Lee, J.D. Lee, "Income and CO2 emissions: evidence from panel unit root and cointegration tests," Energy Policy, vol. 37, pp. 413-423, 2009.
[34] H. Li, J.L. Chen, G. Li, C. Goh, "Tourism and regional income inequality: Evidence from China," Annals of Tourism Research, vol.58, pp.81-99, 2016.
[35] H. Li, C. Goh, HQ. Zhang, F. Meng, "Effect of Tourism on Balanced Regional Development: A Dynamic Panel Data Analysis in Coastal and Inland China," Asia Pacific Journal of Tourism Research vol.20, pp.1-20, 2015.
[36] B. Liargovas, D. Giannias, C. Kostandopoulos, "An assessment of the community support framework (CSF) funding towards the tourist sector: The case of Greece," Regional and Sectoral Economic Studies, vol 7, pp.47-66, 2007.
[37] C. Massidda, I. Etzo, "The Determinants of Italian Domestic Tourism: A Panel Data Analysis," Tourism Management, vol.33, pp. 603-610, 2012.
[38] M.A. Rivera, "The synergies between human development, economic growth, and tourism within a developing country: An empirical model for Ecuador," journal of Destination Marketing and Management, vol.6, pp.221-232, 2017.
[39] Rogerson,C. (2002). Tourism-led Local Economic Development: The South African Experience,13,95-119.
[40] M. Saayman, R. Rossouw, W. Krugell, "The impact of tourism on poverty in South Africa," Development Southern Africa, vol. 29, pp.462-487, 2012.
[41] J.D. Sachs, "macroeconomics and helth: investing in health for economic development," report of the commission on macro -economics and health prepared for whom, Genève, 2001.
[42] R. Scheyvens, J. Momsen, "Tourism and poverty reduction: Issues for small island states," Tourism Geographies, vol. 10, pp.22–41, 2008.
[43] A. Seckelmann, "Domestic tourism chance for regional development in Turkey?," Tourism Management, vol.23, pp. 85-92, 2002.
[44] R. Sharpley, P. Naidoo, "Tourism and Poverty Reduction: The Case of Mauritius," Tourism and Hospitality Planning & Development, vol. 7, pp.145-162.
[45] M.T. Sinclair, "Tourism and economic development: A survey," The journal of development studies, vol.34, pp.1-51, 1998.
[46] E. Soukiazis, S. Proenca, "Tourism as an alternative source of regional growth in Portugal: a panel data analysis at NUTS II and III levels," Portuguese Economic Journal, vol.7, pp. 43-61, 2008.
[47] G. Sugiyarto, A. Blake, and M.T. Sinclair, "Tourism and globalization: Economic impact of tourism in Indonesia," Annals of Tourism Research, vol.30, pp.683–701.
[48] C. Tosun, "Host perceptions of impacts A comparative tourism study," Annals of Tourism Research, vol.29, pp.231-253, 2002.
[49] C. Tosun, D.J. Timothy, "Arguments for com-munity participation in the tourism development process," The Journal of Tourism Studies, vol.14, pp. 2–15, 2003.
[50] D. Truong, C.M., Hall, T. Garry, "Perceptions and Experiences of Poor People In Sapa, Vietnam," Journal of Sustainable Tourism, 2014.
[51] A. Wattanakuljarus, I. Coxhead, "Is tourism-based development good for the poor? A general equilibrium analysis for Thailand," Journal of Policy Modeling, vol.30, pp.929-955, 2008.
[52] J. Wen, C. Tisdell, "Regional inequality and tourism distribution in China," Pacific Tourism Review, vol.1, pp. 119-118, 1997.