The Environmental Aspect in Sustainable Development Policies and its Impact on Economic Growth: Empirical Evidence from Arab Countries

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Abstract:

The environment and economic growth are linked, with the health and sustainability of the environment playing a vital role in driving economic prosperity. A well-preserved environment provides essential natural resources, such as clean air, water, and fertile land, crucial for various economic activities, including agriculture, manufacturing, and tourism. This research paper aims to fill a significant research gap by examining the impact of environmental factors in achieving Sustainable Development Goals (SDGs) and policies and their impact on economic growth in Arab countries. It investigates whether the environmental aspect directly affects these countries' economic growth and identifies the environmental challenges and opportunities specific to the region.

A regression model is implemented, utilizing GDP constant values as a proxy for economic growth and CO_2 emissions as the primary independent variable representing the

environmental aspect. The model also incorporates other independent variables reflecting sustainable development policies, encompassing the social dimension, including political stability, employability, and economic dimension, which reflect the industry and foreign direct investment. The study utilizes time series data from 2003 to 2021 and panel data from 16 Arab countries to provide a comprehensive analysis. The paper also reflects some insights related to the Arab SDG index to evaluate the effectiveness of sustainable development policies.

Keywords: Sustainable Development Policies, Arab Countries, Environment, CO2 Emission.

Introduction:

In light of global challenges like climate change, resource depletion, and social inequality, the pursuit of sustainable development has gained significant importance. Arab countries, comprising a range of nations, have acknowledged the significance of implementing sustainable development policies. These policies are designed to achieve sustainable economic growth while safeguarding natural resources and the environment. By striking a balance between economic progress, social advancement, and environmental preservation, these policies aim to enhance the well-being of future generations and the current one.

The Arab world consists of 22 countries as classified by the World Bank, namely Comoros, Djibouti, Egypt, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Algeria, Bahrain, Oman, Qatar, Saudi Arabia, Iraq, Somalia, Sudan, Syria, Tunisia, UAE, Palestine, and Yemen (World Bank, 2021). Recent data from the World Bank reveals that the region's GDP (in constant 2015 US$) reached 2.01 trillion in 2022, experiencing an annual growth rate of 6% (World Bank, 2022). Furthermore, the unemployment rate stood at 10.7% of the total labor force, with an average inflation rate of 5% (World Bank, 2022). These economic indicators provide a backdrop for examining the impact of sustainable development policies on economic growth in the Arab region.

Sustainable development endeavors in the Arab world have been guided by global frameworks such as the 2030 Agenda for SD, which includes the 17 Sustainable Development Goals (SDGs) (UNESCAP, 2021). The Arab countries have recognized the need for interdisciplinary approaches and regional cooperation to address the challenges posed by conflicts and other regional dynamics (UNESCAP, 2021).

Sustainable development policies encompass three main dimensions: economic, social, and environmental. (OECD, 2021; Clune & Zehnder, 2018). Sustainable development policies aim to balance economic growth, protect the environment, and

promote social development. For example, renewable energy investment policies promote clean electricity generation and reduce harmful emissions, achieving environmental sustainability. At the same time, this investment can create new jobs and boost economic growth. Innovation and entrepreneurship can be encouraged and contribute to promoting sustainable economic growth, creating new jobs, and improving the standard of living. (ILO, 2013)

Despite worldwide efforts to mitigate climate change and promote sustainable development, there has been a persistent increase in greenhouse gas emissions, particularly as global economies recover from the COVID-19 pandemic and return to high-speed growth and consumption patterns (IPCC, 2022). Sustainable development policy implementation in Arab countries requires collaboration and coordination among nations, international institutions, civil society, and the private sector (Radwan & Yin, 2015). This necessitates a solid political will, establishing a supportive legal framework, and adopting sustainable practices at various levels of society.

In recent years, significant research has examined the connection between CO2 emissions and economic growth, which has important implications for policy development. It is widely recognized that these two variables have a complex relationship. While economic growth has often been associated with increased

CO2 emissions, it is essential to note that this does not necessarily imply a long-term economic benefit. (Yang, H. et al 2021; Hao, L. et al 2020; Narayan, P. et al 2016) On the contrary, studies have revealed a bidirectional causality between economic growth and CO2 emissions. While economic activities can contribute to higher emissions, efforts to mitigate emissions can also impact economic growth. Therefore, a balanced approach is crucial, where strategies that aim to reduce emissions are carefully designed to ensure a sustainable and resilient economy in the long run. (Mardani, A. et al, 2019)

This paper aims to explore the environmental aspect of sustainable development policies in Arab countries and examine their impact on economic growth. By analyzing empirical evidence and considering the unique characteristics of the Arab region, this study seeks to contribute to the understanding of sustainable development in the context of Arab countries and provide insights for policymakers, researchers, and practitioners.

Theoritical Evidence:

Understanding sustainable development has evolved over time through key publications and international agreements. In 1972, the United Nations Conference on the Human Environment held in Stockholm marked a significant milestone in linking the environment and the economy, and the publication "Limits to

Growth" by the Club of Rome provided an early definition of sustainable development (Meadows et al., 1972). The 1987 Brundtland report by the United Nations Commission on Environment and Development provided an accepted definition of sustainable development, emphasizing the need to meet the current needs of this generation without compromising the needs of future generations (UN, 1987).

International agreements and frameworks have also played a pivotal role in addressing environmental challenges. The United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1992, established a global framework to address climate change (UNCED, 1992). In the Kyoto Protocol, negotiated in 1997, greenhouse gas emissions were supposed to be reduced by the industrialized countries as a target. (UNFCCC, 1997). Subsequent conferences, such as the Copenhagen and Cancun Conventions, aimed to prevent dangerous human interference with the climate system and limit global temperature increases (UNFCCC, 2024), while in 2000, the United Nations adopted the Millennium Development Goals (MDGs) followed by the Sustainable Development Goals (SDGs) in 2015. The SDGs provide a comprehensive framework for sustainable development, encompassing poverty reduction, health, education, equality, environmental sustainability, and other vital areas (UN, 2024). Over the past few centuries, humanity has experienced the Industrial

Revolution, two world wars, and rapid technological development, all of which have significantly impacted the environment. The consequences of these historical events are still visible and raise concerns about sustainability (Edwards, 2005).

The relationship between the environment and economic growth has been a subject of interest in sustainable development research. One theoretical framework used to understand this relationship is the Environmental Kuznets Curve (EKC). The EKC hypothesis suggests an inverted U-shaped relationship between environmental quality and economic output per capita. Initially, as economies develop, environmental degradation may increase.

However, as income levels rise, societies become more conscious of the environment and invest in cleaner technologies, leading to a decline in environmental degradation (Grossman & Krueger, 1994).

The significance of natural resources in ensuring economic progress and advancement extends beyond the present and encompasses the well-being of future generations. The correlation between economic growth and the environment is multifaceted, involving various factors such as the size and structure of the economy, especially the proportion of services in the GDP relative to primary industries and manufacturing. Technological advancements further contribute to this

relationship by offering the potential to mitigate the environmental consequences of production and consumption choices while fostering economic growth (Everett et al., 2010).

According to (Balsalobre-Lorente D. et al. 2018), the interplay between economic growth and CO2 emissions is exemplified by an N-shaped curve observed in the European Union. This curve signifies that as economic growth initially occurs, there is a corresponding increase in emissions. However, the upward emissions trajectory can be offset through various mitigating factors, such as adopting renewable electricity consumption and advancements in energy innovation. These factors play a crucial role in curbing emissions and fostering a sustainable path of economic development.

Implementation of Environmentally Sustainable Policies in the Arab Region:

There are many examples of the implementation of environmental policies in the Arab region; for example, some Arab countries pay close attention to renewable energy development, including solar and wind, to decrease dependence on fossil fuels, which eventually helps reduce carbon emissions (Wehrey, F. et al. 2023).

Egypt is adopting a strategy that focuses more on environmental development and includes objectives such as promoting renewable energy, preserving water resources, and improving the quality of education and health. It includes investing in renewable energy and adopting policies to promote investment in renewable energy, such as solar and wind. (Ministry of Planning and Sustainable Development, 2022)

Large projects have been developed to generate electricity from solar energy, such as the Benban solar plant and the Benban wind plant. Laws and regulations that encourage modern technology and environmental practices in the industrial sector have also been adopted. As for managing water resources in Egypt, this came through the development of programs to improve agricultural irrigation and achieve better efficiency in using agricultural water. Desalination and recycling projects have also been implemented. In the field of public transport, policies have been adopted to promote the use and improvement of public transport in Egypt, such as developing the electric train system and improving public bus services.This is to reduce citizens' dependence on private cars and reduce carbon emissions. (UN, 2021)

An example is Egypt's adoption of renewable solar energy as an energy source where sunlight is abundant throughout Egypt, especially in the south. The sun shines brightly for up to 11 hours. The shift to solar energy helps reduce Egypt's growing

demand for electricity in an environmentally friendly way while reducing energy costs. Egypt's efforts have also expanded with the United Nations Development Programme (UNDP) and the European Union to support Egypt's presidency of the COP27 in cooperation with the African Climate Foundation and the governments of Denmark and Switzerland. Working in close partnership with the Government of Egypt, this program has succeeded in promoting efforts to make Sharm El Sheikh green as the host city of COP 27, one of the main objectives being to demonstrate how this city can become the main engine of green energy. (UNDP, 2023)

Among these applications, promoting sustainable agriculture and adopting agricultural practices that preserve biodiversity and protect water resources, as in some Maghreb countries (Morocco et al.) where agriculture has fundamentally changed and over time has become the primary economic sector responsible for multiple environmental impacts, these countries are also working on the possibility of replacing mineral fertilizers with bio-organic fertilizers to reduce environmental pollution and improve soil growth. Morocco has made significant progress regarding techniques and practices for providing, collecting, and bottling irrigation water. Since 1956, Morocco has placed water at the heart of its development equation and directed its water management policy towards mobilization, rationalization, and

development of conventional and non-conventional water resources. (Abu-Hashim, M, 2021)

Promoting sustainable agricultural practices, preserving biodiversity, and combating desertification and environmental pollution by preserving natural resources be achieved to ensure equality and social justice and enhance growth and development opportunities for all segments of society that took place in emerging economies such as Brazil, China, Mauritius, and South Africa; green investments have been shown to accelerate economic growth and job creation. A 2010 World Bank study on Brazil concluded that GDP could increase by 0.5 percent annually above average from 2010 to 2030 by adopting a low-carbon development path, avoiding emissions from land-use change (through protecting forests), and using energy efficiently and using Renewable energy, while job creation will be 1.13 percent faster over the same period. (Chateau, J. 2011)

In addition to developing sustainable tourism, as tourism is a vital sector in many Arab countries, policies have been implemented to develop sustainable tourism, including preserving natural and cultural sites, promoting sustainable environmental and cultural tourism, and encouraging responsible tourism practices. For example, Jordan is famous for the Petra Tourism Project, which aims to preserve cultural heritage and

promote local development, as well as efforts to preserve the Dana and Ajloun reserves. (Al-Quran, R. et al, 2019)

Many Arab economies rely on natural resources as their primary source of income. Most middle-income countries suffer from high prices of energy and essential commodities, including basic foodstuffs. The Arab world faces critical environmental challenges such as water scarcity, escalating pollution levels, and climate change. Those challenges affect the ability to conserve natural resources and wildlife and implement renewable energy projects. They also require additional costs and improved infrastructure to adapt to climate change. (ESCWA, 2022)

Some technological challenges prevail, as Arab countries face challenges in adopting clean and sustainable technology due to a lack of technological and research capabilities, weak technological infrastructure, difficulty in accessing modern technology and knowledge, and high adoption costs for clean and sustainable technology. (Radwan, M. & Yin, C., 2015)
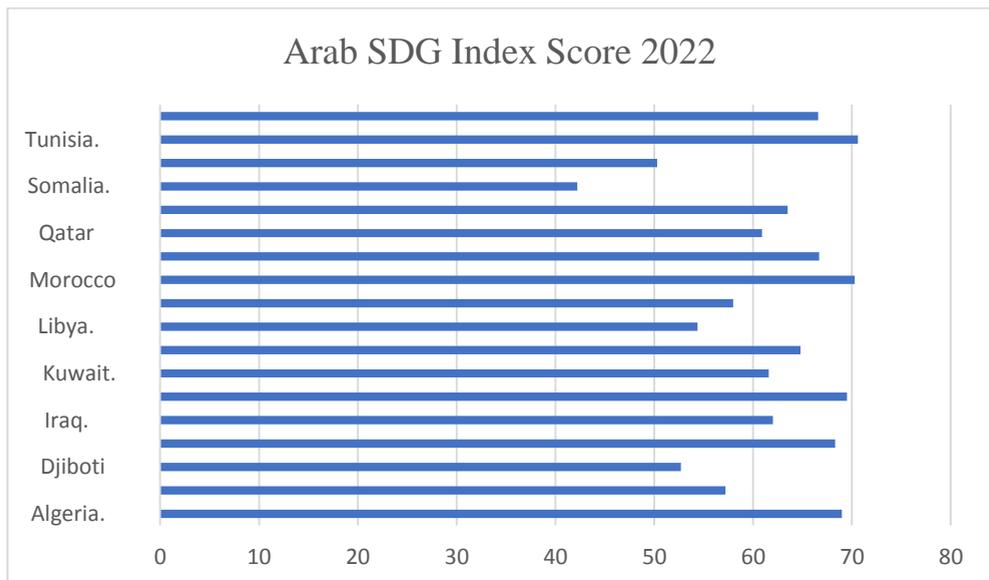
Policies must be adopted to provide an appropriate regulatory framework that may help in promoting a sustainable economy, which includes the development of laws and regulations that encourage sustainable practices and protect the environment, promote corporate social and environmental responsibility, and promote regional and international collaboration in the field of

sustainable economy through the exchange of knowledge, technology, and experiences. Cooperation can be strengthened in environmental trade, technology transfer, and sustainable project financing. (ILO, 2013)

Sustainable Development Index in the Arab Region:

The Arab Region Sustainable Development Index 2022 consists of 110 indicators, covering the seventeen SDGs. Table 1 and Graph 1 reflects Arab sustainable development index in 2022.

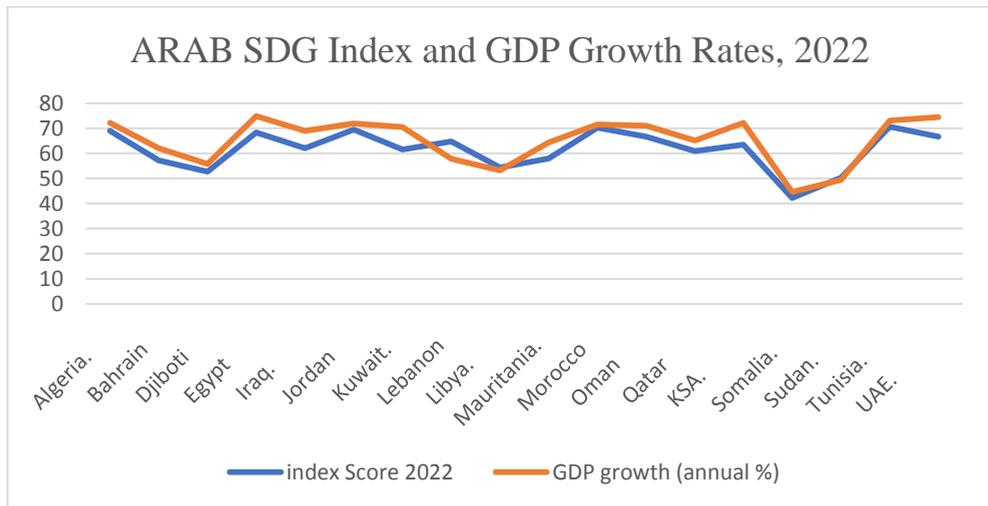## Graph 1: Arab SDG Index and Dashboard Report 2023

Depicted by the Author, source: Zakzak, L. et. Al, 2023

The index reveals varying levels of progress in sustainability efforts. Algeria shows remarkable progress with a score of 69, indicating fruitful achievements towards the SDGs. Similarly, Egypt, Jordan, and Morocco are showing remarkable progress, with scores of 68.3, 69.5, and 70.3, respectively, reflecting their commitment to sustainable development. Regarding Egypt, its gross domestic product (GDP), estimated to be approximately $268 billion in 2015, is projected to experience significant growth, surpassing $577 billion by 2030. This substantial increase in GDP signifies Egypt's concerted efforts in achieving SDGs. (Bohl, D. et al, 2018)

On the other hand, Djibouti, Libya, Somalia, and Sudan have scores of 52.7, 54.4, 42.2, and 50.3, respectively, indicating the need for significant improvements in sustainability initiatives there. Among the countries with moderate progress, scores range from 57.2 to 66.7, including Bahrain, Iraq, Kuwait, Lebanon, Mauritania, Oman, Qatar, Saudi Arabia, Tunisia and the United Arab Emirates. The index shows that there are common challenges among Arab countries around the goals of decent work and economic growth, gender equality, and sustainable food production systems. Goal 5 (gender equality) remains the most critical challenge across the region, followed by Goal 2 (Zero Hunger) and Goal 8 (Decent Work and Economic Growth). (Abdullatif, A. et al, 2019)

Challenges also remain regarding Goal 3, Goal 6, Goal 9, Goal 14, Goal 16, reflecting (industry, innovation, and infrastructure)(good health and well-being), (clean water and sanitation), (life below water), and peace, justice, and strong institutions). Six countries have come two-thirds of the way to achieve (SDGs), with six countries achieving 66 points or higher. These countries are Algeria, Jordan, Tunisia, the United Arab Emirates, Morocco, and Oman. On the other hand, three countries have scored less than 50% in achieving the SDGs: Yemen, Comoros, and Somalia. Compared to the rest of the world, the Arab region does not achieve the sustainable development goals as required due to its average score of 58.2 points out of 100. More extraordinary efforts and focus on regional collaboration are needed to achieve the SDGs within the remaining time frame. (Zakzak, L. et. Al, 2023)

Graph 2: ARAB SDG Index and GDP Growth Rates in the Region, 2022

ARAB SDG Index and GDP Growth Rates, 2022

Depicted by the Author, sources: World Bank, WDI & Zakzak, L. et. Al, 2023

Graph 2 shows GDP growth rates and the sustainable development index; the graph shows the consistency of GDP growth rates with the sustainable development index, which shows that the increase in growth rates in countries leads to sustainable growth in those countries, concerning countries such as Iraq, Kuwait, KSA, and the UAE, which have relatively high GDP growth rates, ranging from 7.008 to 8.861 percent. It has experienced strong economic growth driven by oil production, infrastructure development, and economic diversification.

However, it is worth noting that Lebanon and Libya have negative GDP growth rates, indicating contraction and economic instability in those countries. Lebanon faces serious economic challenges, including high inflation, unemployment, and political instability. Overall, the graph highlights the varying economic progress and performance levels among the listed countries. While some have made significant progress in sustainable development and economic growth, others face significant challenges and must implement effective strategies to improve sustainable development efforts and economic stability.

Methodology:

The methodology employed in this study is based on two theoretical frameworks: the Environmental Kuznets Curve (EKC) model and the Porter Hypothesis. The EKC model posits an inverted U-shaped relationship between environmental degradation and economic development. It suggests that as income or economic growth increases, environmental degradation worsens but eventually improves as societies become wealthier and have more significant resources to invest in sustainability and environmental protection (Grossman & Krueger, 1994).

The Porter Hypothesis, on the other hand, argues that stringent environmental regulations and sustainable development policies can stimulate innovation and improve the

competitiveness of firms. This theory posits that environmental policies can have positive effects on economic growth by driving technological progress, promoting cleaner production methods, and creating new market opportunities (Kriechel et al.; T., 2009)

Data and Sample:

For this study, panel data for 16 Arab countries from 2003 to 2021 were utilized. This period was chosen to capture long-term trends in economic growth and environmental indicators.

The primary data sources for this analysis include data sets from the world development indicators, the World Bank reflecting the dependent variable, and the set of control variables. The independent variable reflected by CO_2 was imported from the publication office of the European Union. These sources provide comprehensive and reliable data for the variables used in the econometric analysis.

Econometric Model Specification:

The ordinary Least Squares (OLS) regression technique is employed to estimate the parameters of the econometric model. OLS is a widely used and appropriate technique for panel data analysis, allowing for the estimation of the relationship between the variables. To ensure the validity of the panel data analysis,

unit root tests were conducted to verify the stationarity of the variables, and the results are shown in Table 2. The stationarity of the variables is crucial for accurate estimation and inference in panel data models. Variables did not show stationarity at the 5% significance level; however, at the first difference, all variables showed stationarity at a 1% significant level.

Table 2: Unit Root Test

At Level						
Variable	GDPCON	Co2	LF	PS	FDIBOP	INDVACON
Statistics	-2.6042	-2.8458	-2.9904	-3.3338	-3.9040	-2.4268
Probability	*0.0932*	*0.0532*	*0.0369*	*0.0143*	*0.0023*	*0.1352*
At First Difference						
Statistics	-17.7491	-17.3369	-17.5610	-17.6309	-16.3109	-17.2056
Probability	*0.0000*	*0.0000*	*0.0000*	*0.0000*	*0.0000*	*0.0000*

Conducted by Author by using Eviews.

A panel data approach is employed, allowing for the analysis of cross-sectional and time-series variations. Results are reflected in Table 3. The dependent variable used to measure economic growth is GDP in constant values, a widely accepted measure of economic output. The primary independent variable reflecting the environmental aspect is CO2 emissions, considering its relevance as a proxy for environmental degradation.

A set of control variables is included in the analysis to account for potential confounding factors and control for other determinants of economic growth. These control variables consist of:

1. Labor Force: This variable captures the influence of labor availability and productivity on economic growth. Higher labor force participation and productivity are expected to affect economic growth positively.

2. Political Stability: The political stability variable is included to account for the impact of political stability on economic growth. Political stability is hypothesized to promote investment, business confidence, and economic stability.

3. Foreign Direct Investment (FDI): FDI from the balance of payments data is included as it can contribute to technological progress, capital accumulation, and economic growth.

4. Industry Value Added: This variable represents the industrial sector's contribution to economic growth. Higher value added to the industry is expected to influence overall economic growth positively.

Table 3: OLS Regression

Dependent Variable: D(GDPCON)			
Variable	**Coefficient**	**t-Statistic**	**Prob.**
C	0.032508	0.814808	0.4158
D(CO2)	0.034608	10.84658	0.0000
D(LF)	3.093652	18.57549	0.0000
D(PS)	0.056209	4.776019	0.0000
D(FDIBOP)	0.387109	2.353773	0.0192
D(INDVACON)	1.375013	21.90003	0.0000
R-squared	0.981277		
Adjusted R-squared	0.980960		
Durbin-Watson stat	2.063788		
F-statistic	3092.209		
Prob(F-statistic)	0.000000		

Conducted by Author by using Eviews.

The results of the econometric analysis revealed a positive relationship between economic growth (dependent variable), measured by GDP in constant values) Moreover, all the variables above, including the primary independent variable (CO_2 emissions) and the control variables (labor force (LF), political stability(PS), FDI(FDIBOP), and industry value added (INDVACON)). The results show that a 1% increase in Co_2 emission results in a 0.03% increase in GDP, which reflects the dependent variable.

These results are consistent with Han, X., & Chatterjee, L. (1997), as they mentioned that GDP growth in developing countries is correlated with higher levels of CO_2 emissions, which can be influenced by factors such as the industrial structure, fuel composition, and energy efficiency practices. Also, Abid, M. (2016) has mentioned a causal relationship between CO_2 emissions and economic growth represented by GDP per capita. In our model, we have engaged the political dimension in including political stability variable (PS), as according to Dogan, E., & Turkekul, B. (2015), they have mentioned that in countries characterized by democratic governance, low levels of corruption, and vibrant civil societies, the relationship between GDP per capita and CO_2 emissions takes on a non-monotonic pattern, which means that as GDP per

capita increases, the corresponding increase in CO2 emissions initially occurs faster.

However, as the country's economic development progresses and reaches a certain level, the growth in CO2 emissions slows down or even begins to decline. The findings are consistent with the EKC model and Porter Hypothesis, as the data set in this study reflects Arab countries with a low level of development.

The Adjusted R-squared value of 98% indicates a high goodness-of-fit of the model, suggesting that the included variables explain a substantial portion of the variation in economic growth among Arab countries. The Durbin-Watson statistic of 2.06 indicates the absence of significant autocorrelation in the model.

Conclusions and Recommendation:

Arab countries are working to develop and implement sustainable development policies to the sustainable development goals set out in the United Nations Agenda for Sustainable Development 2030. In conclusion, this study examined the environmental aspect of sustainable development policies and its impact on economic growth in Arab countries. The empirical analysis revealed a positive relationship existed between

economic growth, as measured by GDP in constant values. All the variables considered in the model, including the primary independent variable, CO_2 emissions, as well as the control variables, such as labor force (LF), political stability (PS), FDI (FDIBOP), and industry value added (INDVACON). Specifically, a 1% increase in CO_2 emissions was associated with a 0.03% increase in GDP, indicating a positive relationship between these variables. The results match with the findings of previous studies. Han and Chatterjee (1997) emphasized the correlation between CO_2 emissions and GDP growth in developing countries, highlighting the influence of factors such as industrial structure, fuel composition, and energy efficiency practices. Additionally, Abid (2016) identified a causal relationship between CO_2 emissions and economic growth represented by GDP per capita.To capture the political dimension, we incorporated the variable of political stability (PS) into the model, in line with the observations of Dogan and Turkekul (2015). Their research demonstrated that in countries characterized by democratic governance, low corruption levels, and vibrant civil societies, the relationship between GDP per capita and CO_2 emissions exhibits a non-monotonic pattern: as GDP per capita increases, CO_2 emissions rise faster.

However, as the country's economic development advances and reaches a certain level, the growth in CO2

emissions decreases or even declines. The findings are matching with the theoretical expectations derived from the Environmental Kuznets Curve (EKC) model and the Porter Hypothesis. The dataset used in this study reflects Arab countries with relatively low levels of development.

Moreover, the model exhibited a high degree of goodness-of-fit, as indicated by an Adjusted R-squared value of 98%. The results suggest that the included variables explain a portion of the variation in economic growth among Arab countries. Furthermore, the Durbin-Watson statistic of 2.06 indicated the absence of significant autocorrelation in the model.

The research also indicates that there are common challenges in the Arab world in achieving the SDGs, such as achieving gender equality, decent work, economic growth, and sustainable food production systems. Using the Sustainable Development Index for the Arab region, the research shows a mixed performance among Arab countries in achieving sustainable development goals. Some Arab countries have made progress in achieving the SDGs, such as Algeria, Jordan, Tunisia, Morocco, Oman, and the United Arab Emirates. However, more significant efforts are still needed to achieve the remaining goals in these countries and the region.

In conclusion, this research contributes to understanding the environmental aspect of sustainable development policies and their impact on economic growth in Arab countries. These insights can inform policymakers and stakeholders in formulating effective strategies that balance economic growth with environmental sustainability. As in the context of Arab countries, where economic growth and environmental sustainability are of paramount importance, several strategies can be prioritized to achieve a balance between the two. Firstly, a strong emphasis should be placed on transitioning to renewable energy, including solar and wind power, to decrease reliance on fossil fuels; this can be supported by implementing policies that incentivize investment in renewable energy infrastructure and provide financial benefits for clean energy adoption. Additionally, promoting energy efficiency measures across industries, buildings, and transportation sectors would help lower energy consumption and reduce environmental impact. Encouraging sustainable transport options, such as public transportation and cycling infrastructure, can reduce emissions and congestion. Implementing stringent environmental regulations and enforcing compliance with standards would ensure responsible business practices. Furthermore, fostering public awareness and education campaigns about the importance of sustainability and promoting sustainable land use practices, including reforestation and conservation efforts, would be instrumental. By prioritizing these

strategies, Arab countries can pave the way for sustainable economic growth while safeguarding their natural resources and environment for future generations.

List of Tables:

Table1: Arab Sustainable Development Index.

Country	Arab SDG Index Score 2022
Algeria.	69
Bahrain	57.2
Djiboti	52.7
Egypt	68.3
Iraq.	62
Jordan	69.5
Kuwait.	61.6
Lebanon	64.8
Libya.	54.4
Mauritania.	58
Morocco	70.3
Oman	66.7
Qatar	60.9
Somalia.	42.2
Sudan.	50.3
Tunisia.	70.6
UAE.	66.6

Source: (Zakzak, L. et. Al, 2023)

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