

The Role Of The Development Plan In Achieving The Sustainable Development Goals In Najran Region, Saudi Arabia

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Abstract:

As sustainable development becomes increasingly important to the economic success and social well-being of any government at any level, the effective use and protection of natural resources has increased. Local governments are at the forefront of sustainability policy development in many ways. This study investigates the Citizens' satisfaction with the role of the development plan in achieving the Sustainable Development Goals in Najran region of Saudi Arabia. We use the principal component analysis (PCA) in items and a linear regression model to explain the sustainable development perception of respondents. We find that there is a positive correlation between the role of the development plan in achieving the Sustainable Development Goals and the variable representing the sustainable development priorities, water, education and protecting rights for future generations. This study is beneficial for local policymakers in adopting strategies that lead to sustainable development in Najran region.

Keywords: Development plan, Sustainable development goals, Principal component analysis, Saudi Arabia, Najran.

1. Introduction

Saudi Arabia, as one of the world's largest energy producer, is determined to make a positive contribution to the global fight against climate change. Since the launch of Vision 2030, Saudi Arabia has made great strides in addressing its unique environmental challenges. In October 2021, Saudi Arabia launched the Saudi Green Initiative (SGI). This initiative targets to increase Saudi Arabia's reliance on clean energy, offsets emissions and protects the environment, in line with Vision 2030. It is about improving the quality of life and promoting sustainable development. The objectives of SGI are in line with those of the 2021 United Nations Climate Change Conference or COP26.

Moreover, the United Nations' Sustainable Development Goals aim to end poverty, protect the planet and ensure prosperity for all by 2030.

Like all countries in the planet, Saudi Arabia is committed to achieving the 17 life-changing goals, as set by the United Nations in 2015. These global goals, also known as the Sustainable Development Goals (SDGs), include poverty eradication, hunger eradication, dignified and healthy living, good quality of education, gender equality, clean water, affordable clean energy, decent employment and economic growth, innovation and infrastructure, reducing inequality, and sustainable cities and societies. They also include responsible production and consumption, climate conservation, marine life, wildlife, peace, justice and strong institutions. The SDGs aim to restore global balance by reconfiguring the current trajectory of economic expansion (Adebayo, 2022).

In general, sustainable development is a kind of development that aims to meet the needs of the present without compromising the ability of the

next generation to meet its own needs (Bruntland Commission, 1987). Saudi Arabia has sought the help of competent institutions to achieve sustainable development for most quarters. This trend calls for the development of economic policies and strategies in all areas. Among the areas concerned are Najran, located in the southernmost part of Saudi Arabia, bordered to the north by the provinces of Al-Salil and Wadi al-Duwaser and from the south of Yemen, while to the west, its governor Dhahran is located in the south of the Asir region and bordered to the east by Oman. Najran extends between the 17, 20-degree north latitudes, and the 44-52 east lines. It is characterized by its mountainous surroundings to the west and north. The region has a population of 608,467 that is equivalent to about 1.78% of Saudi Arabia's total national population (General Authority for Statistics, 2022).

The Future of Saudi cities program is a collaborative program between the Ministry of Municipal, Rural Affairs and the United Nations Program. This program was implemented in 17 cities in Saudi Arabia, including Najran, where it was considered a typical sample of other cities. Habitat's program is based on a 3D approach that is concerned with space planning and its relationship to regulatory and institutional frameworks in addition to financial mechanisms.

The Comprehensive Urban Vision report for Najran contains several strategic elements, including the city's diagnostic urban analysis and its comparison with the UN-Habitat Sustainable Development Framework, with the aim of identifying a clear strategy for the sustainable development of Najran (UN-Habitat, 2019). The City Prosperity Index consists of six axes that can set the objectives that help formulate evidence-based policies: economic productivity, infrastructure, quality of life, equality and participation, environmental sustainability, governance and regulation.

Despite efforts at all levels of government in Saudi Arabia to achieve sustainable development, there is still a disparity among cities, particularly in activities, services, and investment concentration in various areas. Government agencies are aware that unless this disparity in the provision of social and

economic opportunities in all regions is corrected, the state will not reach the desired sustainable development.

The Portland Report of 1987 defined sustainable development as "development that meets the needs of the present without jeopardizing the ability of future generations to satisfy their needs". This definition includes the idea of the main needs of the poorest social groups that the state must take great care of and the idea of limited environmental resources to respond the current and future needs of humanity. Sustainable development is a term of the United Nations and aims mainly at developing natural and human resources, and improving the economic and social level together. So that the needs of the present are met without compromising the rights of future generations, and sustainable development is an economic opportunity through which markets are established, doors of action are opened and social opportunity is considered by upgrading the lower levels to the middle and upper levels.

Sustainable development is a fundamental requirement for people. In addition, sustainable development is one of the priorities of the basic function of the state, which is why we have come up with the idea of this study, which aims to recognize the degree to which the development plan contributes to sustainable development in the Najran region. The problems facing various government organizations and abound and the great responsibility of the institutions dealing with strategic plans in achieving sustainable development abounds and the problem of research is the following question: What is the role of the development plan in achieving the sustainable development goals in the Najran region.

There are two basic hypotheses of this research: The first hypothesis: there is a statistically significant relationship between the role of the development plan and the achievement of the Sustainable Development Goals.

The second hypothesis: there is a negative relationship with statistical significance between climate change and the achievement of the Sustainable Development Goals.

The study seeks to achieve the following goals:

- 1- Clarifying the relationship between the role of the development plan and its components and achieving the

sustainable development goals in the Najran region.

2- Identifying the role of the development plan in achieving the Sustainable Development Goals using the Principal Component Analysis (PCA).

3- Make a set of recommendations and proposals that will enable the development plan to achieve the Sustainable Development Goals in the Najran region.

The importance of this study lies in the fact that all regions in Saudi Arabia are keen to implement the development plan to reach the sustainable development goals. The implementation of the development plan is an urgent and imperative necessity to reach the development goals. It stems from its focus on demonstrating the scientific and practical steps of the PCA method in determining the relationships between the sustainable development perception and its determinants.

The remaining paper is organized as follows. In section 2, we present an overview of sustainable development in Saudi Arabia. Section 3 presents the data and methodology. Section 4 analyzes and discusses the results. Section 5 concludes the study.

2. An overview of sustainable development in Saudi Arabia

Sustainable development can be classified into three main aspects: economic sustainability, social sustainability, and environmental sustainability. Economic sustainability implies sustainable economic growth. Social sustainability is achieved by increasing the number of housing units, enhancing the quality of open spaces and improving education, sanitation and health. Environmental sustainability means increasing landscapes, reducing the harmful effects of energy, improving access and transport, improving water and air quality, and improving waste management and recycling methods (Helmi et al., 2021). Many indicators have been developed for measuring sustainable cities by different organizations and research groups. These tools are available for implementation by others, and generally encompass aspects of sustainable development that go beyond environmental dimensions alone, such as health and public services, governance, income,

business opportunities and transportation (Science for Environment Policy, 2018). Sustainability indicators are tools that enable municipal managers and decision makers to assess the socio-economic and environmental impact, for example, of current urban designs, infrastructure, policies, waste disposal systems, pollution and citizens' access to services. They help diagnose problems and pressures, and identify areas that can benefit from good governance and science-based responses. They also enable cities to monitor the success and impact of sustainability interventions.

Saudi Arabia was witnessing economic prosperity and progress in all areas of social, economic and environmental development, which had led to significant improvements in all human development indicators such as living standards, health, educational services, environmental conditions and overall development potential. The country ranked 39th in the Global Human Development Index for 2018, making it one of the countries with high development (United Nations Development (UNDP), 2019).

Saudi Arabia is one of the top 20 economies in the world, with 15 provinces and more than 35 million citizens (Olawumi and Chan, 2018). The country's Gross Domestic Product (GDP) is 2637 billion Saudi Arabian Riyal (SAR). The GDP per capita is 75,331 SAR, with total savings to GDP of 12.71% during 2020 (General Authority for Statistics, 2022). Saudi Arabia's economy is heavily dependent on energy consumption, leading to higher carbon emissions. Saudi Arabia's economy has flourished thanks to huge profits from the sale of oil (Kwon and Bailey, 2019). Najran's GDP amounted to 16.3 billion riyals in 2012, or 0.6% of Saudi Arabia's GDP or 1.4% of the Kingdom's GDP, net of crude oil and gas revenues. The region's average annual GDP growth rate was 23.8% between 2009 and 2012. Trade ranked first in the regional contribution to GDP of 24.4%, followed by the transport, warehousing and communications sector of 13.8%, the real estate and financial services sector of 13.3%, the construction sector of 9.8%, the social and personal services sector 4.4%, 4.3% for industry and 3.8% for agriculture (UN-Habitat, 2019).

Sustainable development is a major challenge facing the world today with high global growth

rates of poverty and inequality, climate change, and financial and economic crises. These problems are no longer confined to a specific place but become global problems that do not know geographical boundaries, threaten generations, and for people to be able to live in an environment that is compatible with their human rights and dignity, it has to be in the context of sustainable development.

Saudi Arabia is vulnerable to the effects of climate change that are increasingly threatening its water security, such as reducing the frequency and amount of rainfall and increasing temperature. The country is arid, and the sandy desert makes many areas vulnerable to flooding and desertification. It lacks permanent water resources and must therefore rely on the desalination of groundwater and seawater to meet its water needs. From the climate change side, Saudi Arabia has signed the 2015 Paris agreement on climate, and is making a great effort to reduce carbon dioxide emissions “up to 130 million tons of carbon dioxide (CO₂) equivalent emissions per annum by 2030” (Wagon et al., 2019, p. 5). Saudi Arabia recognizes the urgent need to flatten the global carbon emissions curve and accelerate the transition to a low-carbon economy. For its part, Saudi Arabia pledged to reduce carbon emissions to zero by 2060, allocating more than \$180 billion to this effort. Saudi Arabia's Net Plan was announced at the launch of its Saudi Green Initiative, prior to its participation in COP26. Saudi Arabia was placed among the leading leaders in climate action by committing to reducing methane emissions by 30% and annual carbon emissions by 278 million tons by 2030. In addition to offsetting carbon emissions - and in line with COP26's goal of ending global deforestation - Saudi Arabia's Green Initiative has also committed Saudi Arabia to capturing 200 million tons of carbon emissions by planting 450 million trees and rehabilitating 8 million hectares of degraded land by 2030. Despite this, the Kingdom's green ambitions support the international community in addressing environmental challenges and open up attractive opportunities for energy investors and good jobs for the next generations (King Abdullah Petroleum Studies and Research Center (KAPSARC), 2021).

The Saudi government recognizes the need to study current educational policies and their contribution to the country's economy and

climate (Allmnakrah and Evers, 2020). In urban development and the strategic growth of the city, predicting water demand is essential. Planning is also critical to many serious options, such as demand management, planning, design and optimal use of water resources (Ghafari et al., 2020). Achieving the goals set out in the Paris Agreement requires an important investment in educational transformation. Therefore, the development plan of the Kingdom of Saudi Arabia plays a central role in structuring education because it enables the formation of values, and the understanding and awareness of climate change and sustainability (Nevin, 2008; Ozturk, 2008). It is imperative that global and local policy and leaders invest in education systems. These systems should have the quality and appropriate focus needed to achieve sustainable economic development and reduce human made environmental risks (Jong-Wha, 2014). The Kingdom has made several promises to meet the needs of its citizens and approval of the international commitment on sustainability and climate change (for which Saudi Arabia is responsible for 4% of all global emission) (Saiyid, 2021).

Yet, Saudi Arabia appears to have made no significant progress in reducing CO₂ emissions. According to Brown (2020, paragraph 4), regardless of their rhetoric on sustainability and climate change, Saudi Arabia has very weak "CO₂ reduction targets" and "actions have failed to live up to the rhetoric. Brown (2020, paragraph 4) “adds that the Kingdom continues to block discussion around fossil fuel subsidy removal that the G20 plans to implement by 2025.”

There are also many water-related problems in Saudi Arabia, including population expansion, climate change, water pollution, lack of untapped water bodies and escalating droughts (Khan et al., 2021).

3. Data and Methodology

3.1. Data description

Primary data were collected by employing a questionnaire, which was distributed at the end of year 2021 to a sample of 200 citizens of Najran region. The questionnaire includes the following parts:

- Personal information.

- The role of the development plan in achieving the Sustainable Development Goals;
- Sustainable development priorities ; and
- Factors of Sustainable development (water, education and protecting rights for future generation).

Reliability of the questionnaire is tested using Cronbach's alpha (Taber, 2018). This coefficient is used to know how much there is a correlation between measurements expressing the opinions of the study sample. Its value is less than or equal to one, being generally considered

acceptable from 0.7. we find that the value of Cronbach's alpha coefficient is equal to 0.834, which is higher than the minimum acceptable value of 0.70. This means a high degree of stability and reliability of the results of the analysis.

Tale 1 reports the distribution of respondents according to their gender. It shows that 111 (55.5%) individuals from the study sample are males and that the number of female individuals in the study sample is 89 (44.5%). Therefore, there is a relative balance between the two categories.

Table 1. Frequency distribution of respondents according to gender

	Frequency	Percent	Cumulative Percent
Female	89	44.5	44.5
Male	111	55.5	100.0
Total	200	100.0	

Source: Authors own calculations

Table 2 presents the distribution of respondents according to their age. It shows that 48% of respondents having the age between 25 and 34, 27% between the ages of 35 and 45, 12.5% between the ages of 18 and 24 and 8% between the ages of 45 and 54. Thus, we note that most of the sample of the study is young people. This

is conform to population distribution in Najran. It faces an increasing demographic imbalance in the population; Young people under the age of 30 account for 60% of the population, with a population growth rate of 2.7% (UN-Habitat, 2019).

Table 2. Frequency distribution of respondents according to age

	Frequency	Percent	Cumulative Percent
18-24	25	12.5	12.5
25-34	96	48.0	60.5
35-45	54	27.0	87.5
45-54	16	8.0	95.5
55-64	7	3.5	99.0
less than 18	1	.5	99.5
more than 65	1	.5	100.0
Total	200	100.0	

Source: Authors own calculations

Table 3 presents the frequency distribution of respondents according to academic qualification. It shows that 49.5% of respondents hold bachelor's degrees. The percentage of respondents having a master degree or a doctoral degree was equal to 23%, while those who attended primary school were only 3%.

Table 3. Frequency distribution of respondents according to academic qualification

	Frequency	Percent	Cumulative Percent
Bachelor's degree	99	49.5	49.5
Postgraduate studies	46	23.0	72.5
Primary school	6	3.0	75.5
Secondary school	48	24.0	99.5
Did not attend school	1	.5	100.0
Total	200	100.0	

Source: Authors own calculations

Table 4 reports the frequency distribution of respondents according to their profession. It shows that 38% of respondents work in the government sector, 22.5% of respondents work in the private sector and 24% are unemployed.

Table 4. Frequency distribution of respondents according to profession

	Frequency	Percent	Cumulative Percent
Private business	19	9.5	9.5
Private sector employee	26	13.0	22.5
Public sector employee	76	38.0	60.5
Student	31	15.5	76.0
Unemployed	48	24.0	100.0
Total	200	100.0	

Source: Authors own calculations

3.2. Methodology

Firstly, we use the Principal Component Analysis (PCA) to create some external factors that can affect sustainable development in Najran region. The PCA is an indispensable mathematical method for visualization and dimensionality reduction for data. It is a technique that transforms high-dimensions matrix data into lower dimensions while retaining as much information as possible. The principal of this method is to extract the principal components (dimensions) from a large matrix. Furthermore, PCA is extremely useful when working with data sets that have many features and used in different applications such as image processing.

Secondly, we check the normality of the obtained components. The normality will be verified using two normality tests, which are Kolmogorov-Smirnov and Shapiro-Wilk tests. If both variables are normal, the correlation between them is tested using Pearson

correlation coefficient. In the other case, we test the correlation by the Spearman coefficient.

Finally, we estimate the following linear regression model: where the dependent variable is the sustainable development (Y) and the independents variables are X and the factors obtained by PCA method, α is the constant of the model, a_1 and a_2 are the coefficients and ϵ is the error term.

$$Y = \alpha + a_1 X + a_2 Z + \epsilon \quad (1)$$

Where Y is the dependent variable that represents sustainable development perception by respondents. It represents the average of three variables obtained from the questionnaire: "Do you trust the ability of the Najran region's official agencies to reach the 2030 Sustainable Development Goals?", "Do you think sustainable development is a priority for the official community in the Najran region?", and "Will the Najran region be able to complete the agenda of the Sustainable Development Plan in accordance with the vision of 2030?". The independent variable X represents the average

of the factors: "Is there sufficient concern for the environment from (governmental and non-governmental) actors in the Najran area?", "Do you think the Najran region is directly affected by the challenges of climate change (desertification and drought, environmental disasters, floods?," and "Are you satisfied with the level of education in the Najran region?". The independent variable Z is the external factor determined by the principal component analysis. The parameter α is the constant of the model, a_1 and a_2 are the coefficients of independent variables, and ϵ is the error term.

4. Analysis and discussion of results

4.1. Descriptive statistics

Table 5 reports the frequencies and percentages of respondent answers to different questions. It is shown that more than 50% of respondents think that the authorities in Najran region are interested in implementing the terms of the sustainable development plan. Moreover, more than 50% of respondents think that spending on education, concern for water resources and the preservation of the rights of future generations could contribute to achieving the sustainable development goals.

Table 5. Frequencies and percentages of sample answers to different questions

	Questions	I strongly agree	I agree	neutral	I disagree	I strongly disagree
1	Do you trust the ability of the Najran region's official agencies to reach the 2030 Sustainable Development Goals?	51 (25.5%)	74 (37%)	19 (9.5%)	6 (3%)	50 (25%)
2	Do you think sustainable development is a priority for the official community in the Najran region?	53 (26.5%)	75 (37.5%)	25 (12.5%)	6 (3%)	41 (20.5%)
3	Will the Najran region be able to complete the agenda of the Sustainable Development Plan in accordance with the vision of 2030?	50 (25%)	75 (37.5%)	15 (7.5%)	10 (5%)	50 (25%)
4	Is there sufficient concern for the environment from (governmental and non-governmental) actors in the Najran area?	52 (26%)	70 (35%)	33 (16.5%)	14 (7%)	31 (15.5%)
5	Do you think the Najran region is directly affected by the challenges of climate change (desertification and drought, environmental disasters, floods?	71 (35.5%)	60 (30%)	23 (11.5%)	7 (3.5%)	39 (19.5%)
6	Is the abundance and quality of water one of the challenges of the Najran Sustainable Development Goals?	80 (40%)	68 (34%)	17 (8.5%)	4 (2%)	31 (15.5%)
7	Are you satisfied with the level of education in the Najran area?	48 (24%)	68 (34%)	36 (18%)	26 (13%)	22 (11%)
8	The achievement of sustainable development goals has many benefits for society.	104 (52%)	69 (34.5%)	7 (3.5%)	3 (1.5%)	17 (8.5%)

Source: Authors own calculations

4.2. Results of principal component analysis

Two steps are used for developing an adequate econometric model to our variables. In the first step, we use the principal component analysis in items. In the second step, we estimate the linear regression model where the components obtained by PCA are considered as independent variables.

Firstly, based on the Kaiser-Meyer-Olkin (KMO) measure, we verify if our items are adequate for factor analysis. The results of

KMO measure are given in Table 6. It is shown that the value of KMO is equal to 0.827. This result indicates that items are adequate for factor analysis. In order to confirm this result, we use the Bartlett's test. The initial hypothesis of Bartlett's test is that the correlation matrix is identity, then, rejection of initial hypothesis implies that the data are related and then adequate for factor analysis. The result of Bartlett's test indicates that its statistical value is equal to 500.266 with (p-value <0.001), then confirming that items are acceptable for factor analysis.

Table 6: Results of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.827
Bartlett's Test of Sphericity	Approx. Chi-Square	500.266
	Df	21
	Sig.	<0.001

Source: Authors own estimations

Based on these results, we conduct a PCA method to items using varimax rotation method with Kaiser Normalisation. In addition, the principal components are obtained by regression method. The evolution of Eigen-

values is given in Figure 1, where we observe that the first point of saturation region is two. Therefore, we conclude that the PCA method gives one component factor. The results of PCA are reported in Table 7.

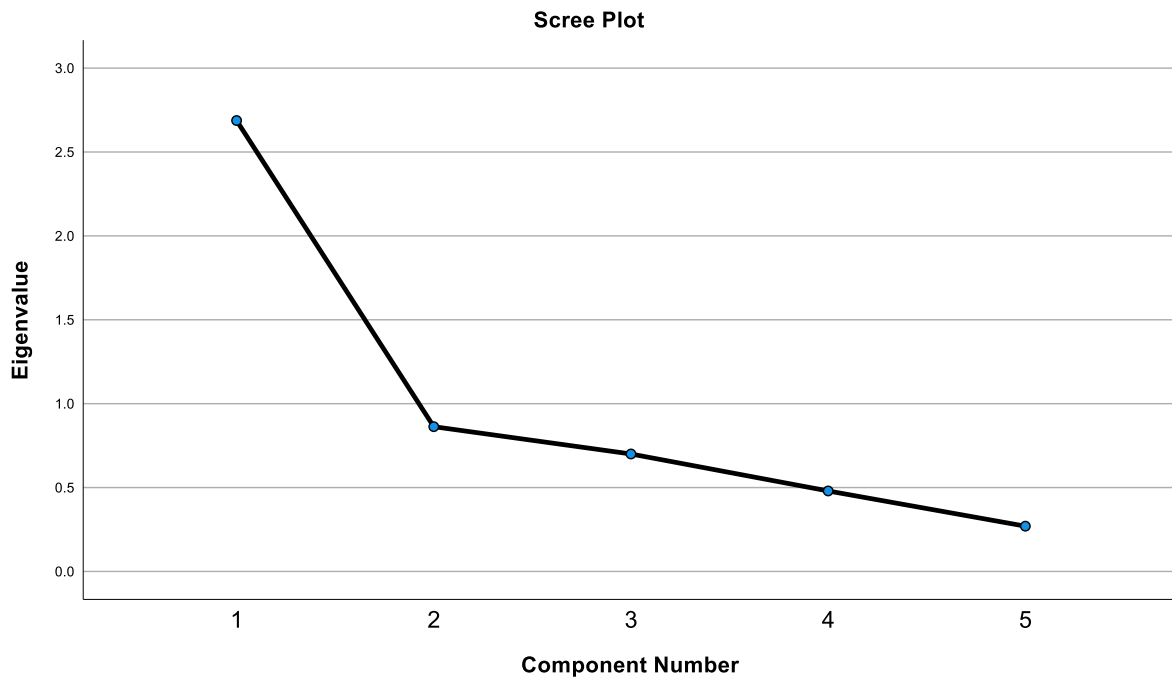


Figure 1: Component number

Table 7: Component Matrix

	Component
Development plan aligns with Saudi Arabia's vision	0.826
Sustainable development priorities	0.827
Water	0.702
Education	0.697
Protecting Rights For Future Generation	0.461
Najran region is affected by the challenges of climate change	0.648
There is sufficient concern for the environment from (governmental and non-governmental) actors in the Najran region	0.734

Source: Authors own estimations

4.3. Results of linear regression model

In order to analyse the impact of some factors representing environmental and social development on sustainable development perception of respondents, we estimate the model given by equation 1.

In order to test the normality of the different variables, we use Kolmogorov-Smirnov and

Table 8. Results of normality tests

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Y	0.176	200	<0.001	0.922	200	<0.001
X	0.115	200	<0.001	0.931	200	<0.001
Z	0.073	200	<0.012	0.960	200	<0.001

Source: Authors own estimations

Shapiro-Wilk tests. The results of these tests are reported in Table 8. They indicate that the studied variables Y, X and Z are not normally distributed. Then, we use the Spearman test for testing correlation between the variables. The results of Spearman test are shown in Table 9. They indicate the existence of a significant positive correlation between Y and X and between Y and Z.

Table 9. Results of Spearman test correlations

			Y	X	Z
Spearman's rho	Y	Correlation Coefficient	1.000	0.615**	0.881**
		Sig. (2-tailed)	.	<0.001	<0.001
		N	200	200	200
	X1	Correlation Coefficient	.615**	1.000	0.723**
		Sig. (2-tailed)	<.001	.	<0.001
		N	200	200	200
	Factor	Correlation Coefficient	0.881**	0.723**	1.000
		Sig. (2-tailed)	<0.001	<0.001	.

		N	200	200	200
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Authors own estimations

Now, we turn to present the results of estimation of the linear regression model. The quality of adjustment of the model is given in Table 10. It is shown that the value of adjusted R square is equal to 0.792, which is acceptable.

Table 10. Model Summary

R	R Square	Adjusted R Square
0.891	0.794	0.792

Source: Authors own estimations

The results displayed in Table 10 are confirmed by ANOVA test given in Table 11 where the Fisher statistical test is equal to 379.826 with a p-value less than 0.05, which implies that the proposed model is statistically significant.

Table 11. ANOVA results

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	151.945	2	75.973	379.826	<0.001
Residual	39.404	197	0.200		
Total	191.349	199			

Source: Authors own estimations

The coefficient estimates are given in Table 12. It is shown that the coefficient of independent variable X is not statistically significant, while the coefficient of the other independent variable Z is positive and statistically significant at 1% level of significance. This result confirms that there some external factors (water, education and protecting rights for future generations) could positively affect sustainable development

in Najran region, whereas the variable X representing the environmental change component does not affect sustainable development perception of respondents. If regional deciders are keen to take care of the aspects linked to water, education and protecting rights for future generations, it is possible to achieve the sustainable development goals.

Table 12. Estimates of the coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
Constant	3.809	0.179		21.281	<0.001	3.456	4.162
X	-0.023	-0.048	-0.023	-0.490	-0.624	-0.117	-0.071
Z	0.890	0.046	0.907	19.442	<0.001	.800	.980

Source: Authors own estimations

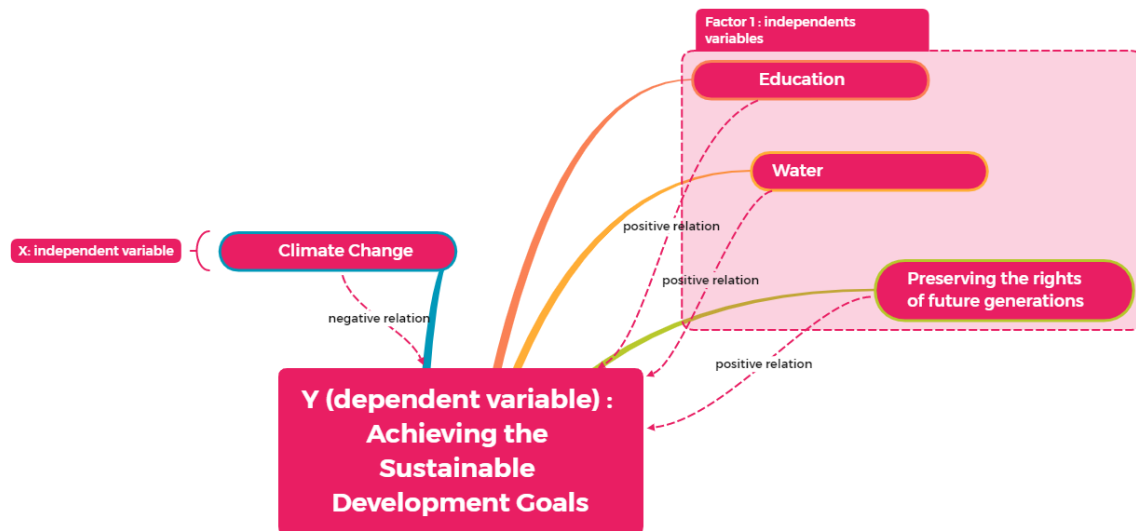


Figure 2. The model

5. Conclusions and policy implications

The regional authorities concerned with the development plan of the Najran region are committed to reaching the Sustainable Development Goals. As the development agenda focuses on education, health, water quality and the preservation of the rights of future generations, the closer the government gets to the sustainable development goals. This result is logical and consistent with the goals of the development agenda, as it aims to achieve global development that leads to a decent life for all members of society. Expenditure on these basic services represents a kind of investment in human resources by raising the level of education of members of society; provide them with a healthy environment and provide them with knowledge and skills that increase the level of individual productivity, thereby raising the level of production and national income, diversifying sources of income and preserving the rights of future generations to national wealth through the equitable distribution of wealth among members of current society. All of this ultimately leads to the success of government policy in achieving the Sustainable Development Goals in accordance with its internationally adopted standards and indicators. In particular, the Saudi government, through its development plans and objectives, seeks to provide the basic human needs of the current and future generations.

Saudi Arabia's dependence on oil reserves and increased energy consumption have led to increased carbon dioxide emissions and is a barrier to achieving the Sustainable Development Goals.

The development policy also aims to achieve sustainable economic growth, improve and raise the standard of living, change production and consumption patterns and equally distribute natural resources, including oil, across generations. The country is also working to combat environmental pollution caused by CO₂ emissions from the oil and chemical industries, which have recently expanded into Saudi Arabia. In order to address the obstacles to sustainable development, the Government should seek to reduce its consumption of petroleum energy and its derivatives and to address such pollution using clean technology, even if it is costly.

These challenges called on Saudi Arabia to take action in the Najran Region, as outlined in international conventions such as the Sustainable Development Goals and the Paris Agreement, especially reducing CO₂ emissions.

Acknowledgements:

Authors would like to acknowledge the support of the Deputy for Research and Innovation - Ministry of Education, Kingdom of Saudi Arabia for this research through a grant (NU/IFC/ENT/01/001) under the Institutional Funding Committee at Najran University, Kingdom of Saudi Arabia.

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