

-RESEARCH ARTICLE-

SUSTAINABLE DEVELOPMENT FUTURES: THE NEXUS BETWEEN INNOVATION AND ALLEVIATING POVERTY

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—Abstract—

The primary aim of this research was to assess the direct influence of environmental challenges, social innovation, and the pursuit of sustainable development objectives on the alleviation of poverty within the context of Iraq. The impetus behind this study was to furnish actionable recommendations for mitigating poverty in Iraq. A sample comprising 296 respondents employed within the governmental sector was surveyed using a Likert scale questionnaire. The study employed a convenience sampling approach to procure cross-sectional data. Data analysis was conducted utilizing SPSS

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26, incorporating regression and coefficient correlation analyses. The findings revealed a direct and positive relationship between environmental challenges, social innovation, sustainable development goals, and the alleviation of poverty in Iraq. This underscores the significance of these factors in contributing to our understanding. Consequently, the Government of Iraq could formulate impactful policies by heeding the recommendations derived from this research for poverty alleviation. Specifically, the study advocates for the Government of Iraq to address environmental challenges and foster social innovation. Furthermore, it strongly suggests leveraging sustainable development goals as a significant tool to foster advancement within the country.

Keywords: Sustainable Future, Poverty Alleviation, Social Innovation, SPSS 26

INTRODUCTION

Poverty has suddenly emerged as an urgent state-of-art challenge for society, accompanied by a rapid deterioration of living standards (Fenner & Cernev, 2021). Many factors contribute significantly to this issue, with the absence of clear comprehensive policies directed towards social development emerging as a fundamental reason. It is the direct responsibility of the government to formulate policies that encourage effective poverty alleviation by instilling a sense of empowerment within the population (Ali et al., 2021). However, not enough attention has been directed towards effectively addressing this phenomenon. Economic instability and poverty are closely linked, which urgently calls for strategic interventions aimed at enhancing living standards (Leng et al., 2024). Developed countries are clearly showing commendable progress in facilitating the improvement of working conditions, thereby significantly reducing the incidence of poverty. In contrast, many developing countries struggle with the challenge of creating effective anti-poverty government structures (Salem et al., 2022).

It is the government's direct duty to manage resources effectively and strategically explore future prospects directed at enhancing the well-being of society (Uralovich et al., 2023). Close cooperation between government agencies and private entities is crucial to creating a fully conducive environment for poverty alleviation initiatives within the country. Moreover, effectively promoting a culture of social cooperation among the public is very much essential for sustainable poverty alleviation efforts (Kumareswaran & Jayasinghe, 2022). At the same time, the dynamic establishment of new enterprises in the market plays a very vital role in assessing the long-term viability of poverty alleviation measures. Ensuring that government operates consistently and adheres to appropriate standards is critical to addressing environmental challenges (Gyimah et al., 2023). The lack of quality education also contributes significantly to persistent poverty, underscoring clear government neglect in this vital area. Iraq grapples difficultly with issues of poverty exacerbated by political and economic

stability, highlighting the great urgency of government intervention in policy formulation (Yasser, 2023).

Bonsu et al. (2020) emphasized that the indispensability of governmental policies could indefinitely tackle such thorny issues of educational deficits and poverty. Caetano et al. (2020) confirmed that instability within policy and society alike in developing countries is a significant obstruction to poverty alleviation efforts. Van Zanten and van Tulder (2021a) highly recommended formulating accountable governmental policies contributing to strategic results. Nonetheless, Van Zanten and van Tulder (2021b) stressed on the potential of team efforts among governments and entities of public sector in an attempt to some extent alleviate poverty. Bannerman (2020) emphasized the interrelationship of social and ecological challenges with poverty, leading to considerable issues for societies. Cernev and Fenner (2020) posited that innovation in education quality and business sector development could, undoubtedly, augment job opportunities, thereby addressing poverty. Last but not least, Baker et al. (2023) coped with the negative social consequences of poverty and stressed on the imperative of strenuous efforts to improve living conditions for the people.

The key objective behind conducting the current paper was definitely to make a kind of assessment for the direct impact of ecological challenges, social innovation, and sustainable development objectives on alleviating poverty in Iraq. The primary motivation behind this research was directly to provide effectively implementable recommendations to urgently address poverty in the context of Iraq. A sample of 296 government employee respondents was comprehensively surveyed using a Likert scale questionnaire. The study adopted an appropriately available sample methodology to obtain cross-sectional data. Data analysis was performed carefully using SPSS 26, and included regression analysis and correlation coefficient analysis. The results showed a clearly positive and direct relationship between environmental challenges, social innovation, sustainable development goals, and poverty alleviation in Iraq. This research contributes significantly to the current body of knowledge by highlighting the importance of these factors. The Government of Iraq can effortlessly and effectively formulate impactful policies to alleviate poverty by following the recommendations taken from this paper. The study directly calls for government action to effortlessly address environmental challenges and promote social innovation. Furthermore, the use of the Sustainable Development Goals is highly recommended as a means of promoting progress within the country. The research findings are neatly organized into distinct sections that include literature review, methodology, results, discussion, and implications.

REVIEW OF LITERATURE

Sampantamit et al. (2020) argue that environmental challenges may not hold significant importance for countries seeking to enhance living standards. However, it is imperative to recognize that communities inhabiting regions afflicted by environmental challenges face considerable adversity. When environmental conditions deteriorate, they precipitate crises that hinder equitable access to economic resources (Omisore, 2018). It falls upon governments to address factors contributing to environmental degradation to facilitate overall environmental amelioration. Timely mitigation of environmental challenges is essential, as the sustainability of communities is intricately intertwined with environmental conditions (Khatter, 2023). A robust approach to environmental enhancement can contribute to poverty alleviation efforts, as public attitudes toward the environment influence their ability to address various challenges (Nave & Ferreira, 2019).

Moreover, providing stable employment opportunities empowers individuals to navigate daily challenges more effectively. Public attention directed toward environmental issues can engender innovative approaches to addressing them (Pagallo et al., 2022). Enhanced environmental conditions in any nation foster business innovation, as multiple companies target environmentally sustainable practices. Consequently, businesses must contend with environmental challenges to remain relevant in contemporary contexts. Stable public behavior could undoubtedly be crucial to effectively addressing environmental challenges (Peterson & Thompson, 2010), as ameliorated ecological conditions interrelate with highly improved human behaviour. Therefore, it is vital to simultaneously ameliorate public behaviour with environmental ameliorations (Amankwah-Amoah, 2020).

In this context, enhancing cooperation among developed and developing countries is undoubtedly fundamentally necessary to address global environmental challenges in a comprehensive manner.

H1 *Environmental challenges has direct impact on poverty alleviation.*

Osei and Zhuang (2020) maintain that social innovation is of a vital role, which is clearly and directly promoting behavioural fluctuations that are unequivocally leading to sustainability. It could effectively enable people to creatively develop novel methods within their various fields, which greatly facilitates market growth. Moreover, Huang and Tsai (2021) state that it strongly highlights the effectiveness of social innovation in enhancing students' readiness to address complex challenges significantly effectively. The importance of social innovation extends to addressing urgent issues such as poverty alleviation, which contributes significantly to alleviating persistent social challenges. (Zameer et al., 2020). Achieving sustainability in social innovation efforts is a key foundation for both public and government agencies in effectively dealing with persistent social obstacles. (Chandra et al., 2021).

In addition, the spread of social innovation initiatives within communities stimulates the creation of highly diverse employment opportunities, which subsequently contributes to effective social status enhancement. A consistent commitment to promoting social behavior through social innovation is absolutely essential, as it fosters a culture highly conducive to sustainable development. (De Silva et al., 2020). Social innovation greatly attempts not only afford people sustainable living arrangements but also enhance continuous learning opportunities, driving behavioural advancements (Manjon et al., 2022). In addition, social innovation is undoubtedly a strong catalyst for entrepreneurial projects, emphasizing its crucial role in promoting sustainable economic activities. By promoting a culture of innovation, social innovation initiatives contribute significantly to effectively enriching social values and norms (Lawson-Lartego & Mathiassen, 2021). Given their enormous transformative potential, governments should prioritize initiatives aimed at significantly enhancing public behavior to facilitate social progress and significantly enhance public productivity.

H2 *Social innovation has direct impact on poverty alleviation.*

Goralski and Tan (2022) assert that The Sustainable Development Goals are primarily focused on providing significantly greater opportunities for the public to raise their standards of living and achieve integrated progress in their lives. Governments of rich countries are strategically and consciously seeking to instill a culture consistent with the Sustainable Development Goals, recognizing its critical importance in promoting public health. Likewise, it is the responsibility of government authorities to ensure the sustainability of public living standards (Li et al., 2022), necessitating a concerted focus on both short-term and long-term objectives to steer the trajectory toward sustainable development. Furthermore, fostering positive societal attitudes toward sustainable development is indispensable for cultivating a conducive cultural milieu (Singh & Chudasama, 2020).

Achieving sustainable development requires a very wise use of resources, a responsibility that falls entirely and unequivocally on governments to manage effectively. (Zhang et al., 2022). In contrast, government inaction towards sustainable development significantly undermines overall living standards, conclusively underscoring the need for government intervention to enhance societal well-being. (Medina-Muñoz & Medina-Muñoz, 2020). Tackling poverty is emerging as a key objective for governments seeking to raise living standards. Policy initiatives targeting these goals not only improve human behavior but also promote strategic approaches to societal progress. (Huang et al., 2020).

International cooperation is urgently necessary to support poor countries in their efforts to alleviate poverty, thus addressing sustainable development challenges in a comprehensive manner. This collaborative endeavor greatly fosters a culture of

teamwork leading to the promotion of social justice within communities. (Huang et al., 2021).

H3 Sustainable development goals have direct impact on poverty alleviation.

The conceptual framework is depicted in Figure 1.

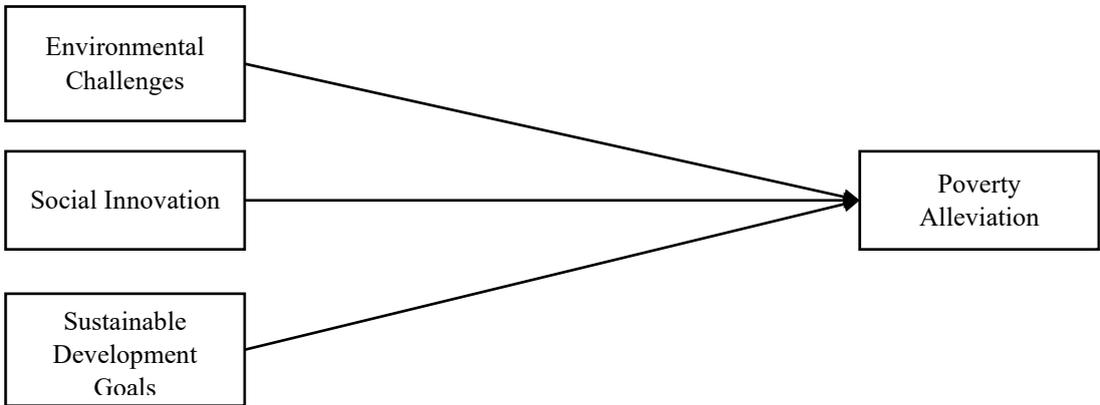


Figure 1. Research Model

METHODOLOGY

The current study employs a quantitative research design, deemed suitable for testing the hypotheses and deriving findings. Quantitative data was gathered through a Likert scale questionnaire, incorporating items drawn from prior research endeavours. Rigorous item selection aimed to mitigate potential errors in results, with validation of items undertaken subsequent to their adaptation and inclusion in the questionnaire. The questionnaire facilitated the collection of cross-sectional data, aligning with the study's suitability for justifying findings through singular data collection. The study population consisted of government officials, chosen for their comprehensive knowledge of poverty alleviation statistics and related policies. Respondents were approached with prior consent and solicited for their responses to the questionnaire.

Data collection utilized convenience sampling, whereby respondents provided data based on their availability. Four hundred printed questionnaires were distributed, accompanied by an explanation of the study's objectives. Additionally, respondents' inquiries were addressed during the data collection process. However, of the distributed questionnaires, only 298 were returned. Preliminary data analysis identified two responses exhibiting bias, which were subsequently excluded. Thus, a final sample of 296 responses was retained for the conclusive analysis. SPSS 26 software was employed to analyse the collected data, encompassing descriptive, correlation, and regression analyses to ascertain the relationships between variables.

FINDINGS

Descriptive statistics were utilized to assess the characteristics of the collected data. Analysis revealed that all 296 responses were valid, with no missing values present. Moreover, both the mean and median values exhibited statistical significance. The standard error of the mean, alongside the confidence interval, was deemed appropriate. Similarly, the standard deviation was scrutinized and found to be statistically significant within the context of the current research.

Table 1: Descriptive Statistics

Furthermore, skewness and kurtosis were examined to evaluate the normality of the

	EC	SI	SDG	PA
Valid	296	296	296	296
Missing	0	0	0	0
Median	4.000	4.000	4.000	4.000
Mean	4.047	3.544	4.000	4.006
Std. Error of Mean	0.087	0.095	0.085	0.085
95% CI Mean Upper	4.219	3.731	4.168	4.174
95% CI Mean Lower	3.876	3.358	3.832	3.837
Std. Deviation	1.128	1.229	1.107	1.110
95% CI Std. Dev. Upper	1.255	1.336	1.213	1.230
95% CI Std. Dev. Lower	0.979	1.121	0.975	0.982
Coefficient of variation	0.279	0.347	0.277	0.277
MAD	1.000	1.000	1.000	1.000
MAD robust	1.483	1.483	1.483	1.483
IQR	1.000	2.000	2.000	2.000
Variance	1.272	1.511	1.226	1.232
95% CI Variance Upper	1.575	1.786	1.472	1.512
95% CI Variance Lower	0.959	1.257	0.951	0.964
Skewness	-1.203	-0.493	-0.932	-1.016
Std. Error of Skewness	0.187	0.187	0.187	0.187
Kurtosis	0.797	-0.622	0.105	0.344
Std. Error of Kurtosis	0.371	0.371	0.371	0.371
Shapiro-Wilk	0.787	0.882	0.816	0.811
P-value of Shapiro-Wilk	< .001	< .001	< .001	< .001
Range	4.000	4.000	4.000	4.000
Minimum	1.000	1.000	1.000	1.000
Maximum	5.000	5.000	5.000	5.000
25th percentile	4.000	3.000	3.000	3.000
50th percentile	4.000	4.000	4.000	4.000
75th percentile	5.000	5.000	5.000	5.000
25th percentile	4.000	3.000	3.000	3.000
50th percentile	4.000	4.000	4.000	4.000
75th percentile	5.000	5.000	5.000	5.000
Sum	684.000	599.000	676.000	677.000

data, with thresholds of -3 and +3 utilized as benchmarks (Royston, 1992). Results indicated significant values for both skewness and kurtosis, affirming the reliability of the dataset. Additionally, the Shapiro-Wilk test was conducted, yielding a p-value of

less than 0.01, which further confirmed the normal distribution of the data. Detailed descriptive data are illustrated in Table 1.

Table 2: Pearsonn’s Correlations

Variable			EC		SI		SDG		PA
1. EC	Pearson's r		—						
	P-value		—						
	VS-MPR	†	—						
	Upper 95% CI		—						
	Lower 95% CI		—						
	Effect size (Fisher's z)		—						
	SE Effect size		—						
2. SI	Pearson's r		0.462	***	—				
	P-value		< .001		—				
	VS-MPR	†	$6.608 \times 10^{+7}$		—				
	Upper 95% CI		0.573		—				
	Lower 95% CI		0.335		—				
	Effect size (Fisher's z)		0.500		—				
	SE Effect size		0.078		—				
3. SDG	Pearson's r		0.543	***	0.538	***	—		
	P-value		< .001		< .001		—		
	VS-MPR	†	$5.159 \times 10^{+11}$		$2.549 \times 10^{+11}$		—		
	Upper 95% CI		0.642		0.637		—		
	Lower 95% CI		0.428		0.421		—		
	Effect size (Fisher's z)		0.609		0.601		—		
	SE Effect size		0.078		0.078		—		
4. PA	Pearson's r		0.589	***	0.556	***	0.804	***	—
	P-value		< .001		< .001		< .001		—
	VS-MPR	†	$2.836 \times 10^{+14}$		$2.597 \times 10^{+12}$		$2.593 \times 10^{+36}$		—
	Upper 95% CI		0.680		0.652		0.852		—
	Lower 95% CI		0.481		0.442		0.743		—
	Effect size (Fisher's z)		0.677		0.627		1.110		—
	SE Effect size		0.078		0.078		0.078		—
* p < .05, ** p < .01, *** p < .001									
† Vovk-Sellke Maximum p -Ratio: Based on the p -value, the maximum possible odds in favour of H ₁ over H ₀ equals $1/(-e p \log(p))$ for $p \leq .37$.									

Measuring the correlations among the variables and clarifying their interactions, they were clearly analyzed using the Pearson correlation coefficient on SPSS 26. Employing this kind of statistical test indefinitely aimed to clearly determine the nature and strength

of the correlations between the variables. The study maintained that there are statistically significant correlations among the variables, as all correlations clearly showed probability values less than 0.001. (Cohen et al., 2009). The results, as explained in Table 2, emphasized that all variables within the research demonstrated significant correlations. Consequently, the dataset was suitable for subsequent analyses.

In addition, the Shapiro-Wilk test was performed separately to assess multivariate normality of the data set. This step aims to accurately verify the adequacy of the normal distribution of the data, which significantly reduces the possibility of errors in the results. Statistical analysis yielded a probability value of less than 0.001, conclusively confirming the presence of an appropriate normal distribution within the data set.** Achieving this degree of normality greatly underscores the strength of the results of the current research.

Table 3: Shapiro-Wilk Test for Multivariate Normality

Shapiro-Wilk	P
0.928	< .001

Furthermore, a Shapiro-Wilk exact test was performed using SPSS 26 to evaluate the extent to which the data met the assumption of bivariate normal distribution. The resulting probability value, which is significantly less than 0.001, conclusively confirmed the validity of the assumption of bivariate normal distribution in the relationships between variables. This greatly enhances the reliability of the data set. Statistical details about the bivariate normal distribution are presented in Table 4. Thanks to this strength of the data, it is suitable for use in future studies.

Table 4: Shapiro-Wilk Test for Bivariate Normality

		Shapiro-Wilk	P
EC	SI	0.937	< .001
EC	SDG	0.919	< .001
EC	PA	0.904	< .001
SI	SDG	0.903	< .001
SI	PA	0.897	< .001
SDG	PA	0.939	< .001

The model summary analysis was finally made to make an assessment for the properties of the model. According to Cohen (1992), an "R-value" higher than 0.4 shows a substantial correlation among the dependent and independent variables, warranting further examination. In this study, the calculated value of "R value" is 0.831. In addition, the R-squared value expresses the proportion of variance in the dependent variable that is explained by the independent variables, where a value exceeding 0.5 conclusively

indicates the effectiveness of the model in explaining relationships. The value obtained for “R-squared” in the current research is 0.691. Furthermore, the “adjusted R squared” precisely measures the generalizability of the results, explaining the difference between the sample results and the population results in multivariate statistical analysis. It is imperative for the "Adjusted R-square" to exhibit minimal deviation from the "R-square" value. The results presented in [Table 5](#) affirm that the model employed in the current study is statistically significant and deemed suitable for further analysis.

Table 5: Model Summary – PA

Model	R	R ²	Adjusted R ²	RMSE
H ₀	0.000	0.000	0.000	1.110
H ₁	0.831	0.691	0.685	0.623

ANOVA findings were utilized to assess the model's significance for subsequent analyses, relying on F statistics and corresponding p-values. According to [Afthanorhan \(2013\)](#), a significance level of 5% or a confidence interval of 0.05 is commonly selected, with p-values below 0.05 indicating statistical significance. Additionally, the F-value reflects the enhancement in variable prediction achieved by the model relative to the inherent inaccuracies, with an F-ratio greater than 1 indicative of an effective model. The outcomes presented in [Table 6](#) affirmed the statistical significance of both ANOVA and the model, warranting further analysis.

Table 6: ANOVA

Model		Sum of Squares	Df	Mean Square	F	P	VS-MPR*
H ₁	Regression	142.936	3	47.645	122.725	< .001	4.794×10 ⁺³⁸
	Residual	64.058	165	0.388			
	Total	206.994	168				

Regression coefficients were examined to establish the statistical relationships between variables. A threshold of $t > 1.96$ was deemed suitable for data analysis. Findings pertaining to Hypothesis 1 affirmed a direct impact of environmental challenges on poverty alleviation ($t = 3.487$). Similarly, Hypothesis 2 results indicated a direct impact of social innovation on poverty alleviation ($t = 2.449$). Additionally, Hypothesis 3 outcomes demonstrated a direct impact of sustainable development goals on poverty alleviation ($t = 11.332$). Detailed results are provided in [Table 7](#).

Table 7: Coefficients

								95% CI	95% CI

Model		Unstandardized	Standard Error	Standardized	T	P	VS-MPR*	Lower	Upper
H ₀	(Intercept)	4.006	0.085		46.916	< .001	8.876×10 ⁺⁹⁴	3.837	4.174
H ₁	(Intercept)	0.313	0.205		1.524	0.129	1.390	-0.093	0.718
	EC	0.182	0.052	0.185	3.487	< .001	79.555	0.079	0.286
	SI	0.117	0.048	0.130	2.449	0.015	5.736	0.023	0.211
	SDG	0.635	0.056	0.633	11.332	< .001	3.349×10 ⁺¹⁹	0.524	0.746

* Vovk-Sellke Maximum *p* -Ratio: Based on the *p* -value, the maximum possible odds in favour of H₁ over H₀ equals 1/(-e *p* log(*p*)) for *p* ≤ .37.

DISCUSSION AND CONCLUSION

Empirical evidence was utilized to substantiate the relationships among variables within the current study. Data collected from respondents underwent comprehensive analysis using SPSS 26 to examine the nature and significance of these relationships. Findings from Hypothesis 1 revealed a direct impact of environmental challenges on poverty alleviation. However, comparison with prior research findings was conducted to contextualize these results. According to [Ye et al. \(2022\)](#), environmental worries could possibly be relatively less vital for countries that aim to significantly raise the living standards of their people. On the other hand, [Yang and Liu \(2021\)](#) emphasized the numerous challenges encountered by people living in areas afflicted by natural adversities. [Doukas and Marinakis \(2020\)](#) suggest that deteriorated natural problems precipitate hardships for affected people, deterring equitable use of economic resources. [Liu et al. \(2020\)](#) paid much attention to the governmental responsibility in addressing problems, which are unequivocally conducive to global advancement, urging abrupt action to alleviate environmental threats for the long-term well-being of communities.

Nonetheless, [Hosan et al. \(2023\)](#) strongly recommend for mitigating poverty as a an extremely reliable strategy to make some enhancement for the worldwide welfare, stressing on the impact of individual behaviours on problem-solving methods. [Lashitew et al. \(2020\)](#) state that providing secure employment opportunities could undoubtedly enable people to navigate daily challenges more effectively. Furthermore, [Maulu et al. \(2021\)](#) state the various initiatives undertaken by companies in coping with environmental concerns, clearly emphasizing the significance of a conducive business environment for innovation. Furthermore, [Rabbani et al. \(2021\)](#) pay much emphasis on the imperative for businesses to address environmental issues to lead to universal advancement. [Guo and Liu \(2022\)](#) recommend making some collaboration among less advanced countries and more developed ones to address the ecological challenges comprehensively.

In conclusion, significantly promoting sedentary behaviors among individuals is absolutely essential to effectively address natural challenges, while improving overall environmental quality is absolutely essential for significantly enhancing prosocial behaviors. This highlights the importance of highly concerted efforts to improve both public behavior and environmental conditions. Likewise, the results of the second hypothesis conclusively confirmed the direct impact of social innovation on poverty alleviation. However, these results are carefully illustrated by comparison with previous research. According to [De Silva et al. \(2020\)](#), promoting sustainable behaviors requires radical change in individual actions, with social innovation largely acting as a catalyst for this change. By introducing improved methodologies, social innovators effectively facilitate the progress of individuals in their various fields. Additionally, [Lawson-Lartego and Mathiassen \(2021\)](#) suggest that providing students with adequate social innovation tools enables them to skillfully navigate complex challenges adroitly, emphasizing its crucial role in dealing with issues such as poverty alleviation.

Furthermore, [Chandra et al. \(2021\)](#) greatly stressed on the ongoing impact of sustainable social innovation in addressing perennial social issues, benefiting both individuals and government agencies. Social innovation not only enhances people's quality of life, but also significantly enhances positive participation in society.. Moreover, [Manjon et al. \(2022\)](#) strongly emphasized that the adoption of social innovation greatly stimulates the adoption of sustainable thinking in individuals, further enhancing social mobility through increased employment opportunities. [Goralski and Tan \(2022\)](#) recommend providing persons with improved opportunities as a reliable strategy for instigating behavioural change via social innovation. Furthermore, [Huang and Tsai \(2021\)](#) state that reliable opportunities are unequivocally vital for persons to effectively tackle social and societal challenges, with social innovation serving as a catalyst for sustainable progress. Simultaneously, social innovation enhances business growth, thereby leading to a more sustainable work environment. Additionally, [Zameer et al. \(2020\)](#) greatly highlight the diverse approaches to social innovation that greatly enhance the culture of innovation, which ultimately directly benefits the entire society. Moreover, government initiatives aimed largely at shaping social behavior contribute significantly to overall productivity and progress of society in general.

Finally, the results of the third hypothesis conclusively confirmed the direct impact of the SDGs on poverty alleviation. However, these findings are carefully illustrated by placing them in the context of previous research. According to [Huang et al. \(2020\)](#), sustainable development aims to provide individuals with significantly greater opportunities to raise their living standards and achieve tangible progress in various aspects of their lives. Governments in rich countries are very strongly encouraged to embrace the Sustainable Development Goals, fully aware of their importance in significantly enhancing public health.. Furthermore, [Medina-Muñoz and Medina-Muñoz \(2020\)](#) assert that the government undertakes its responsibility to ensure that

societal well-being is ensured, with particular emphasis on the importance of balancing short-term and long-term goals to comprehensively support the cause of sustainable development. [Huang et al. \(2021\)](#) strongly assert that behavioral shifts towards sustainable growth are imperative to in still a positive culture that helps achieve it effectively. The best path towards sustainable growth lies in the wise use of resources that are indispensable for the successful achievement of national progress.

Furthermore, [Singh and Chudasama \(2020\)](#) claim that governments play a key role in impacting some kind of enhancements to engender progress and elevate standards. Conversely, [Rabbani et al. \(2021\)](#) caution that the failure of governments to pursue sustainable growth can indefinitely result in mitigated living standards for people, emphasizing the imperative for governmental action to hopefully improve living standards and promote positive societal behaviours.

Moreover, [Zhang et al. \(2022\)](#) state that governments should merely prioritize enhancing standards of living to mitigate poverty, positing that the implementation of regulations aimed at advancing these goals can clearly foster optimal societal behaviour and enhance planning processes. [Osei and Zhuang \(2020\)](#) advocate for collaborative efforts between affluent and impoverished nations to alleviate poverty, viewing it as a fundamental strategy for addressing sustainable development challenges. [Li et al., \(2022\)](#) suggest that promoting trustworthiness in governance can definitely engender a sense of social justice within societies.

Theoretical Implications

The current study carefully advances existing knowledge by showing clearly overlooked relationships between variables. It is quite clear that Iraq's environmental problems have a significant positive impact on the fight against poverty, which is a completely new solution that has not been proposed before. Likewise, the renewal and implementation of Sustainable Development Goals No. 1 in Iraq contributed significantly and significantly to the fight against poverty in areas that recovered relatively quickly. This information contributes significantly to academic discourse and directly helps fill gaps in previous research. The very limited attention paid to these relationships clearly and unambiguously underscores the importance of this study.

Practical Implications

The research findings have important practical implications for Iraq, as they clearly highlight the need for greater governmental attention to environmental concerns. It can be argued that creating effectively enabling environments for public participation is essential to significantly enhance sustainable development. The government should actively support initiatives aimed at enhancing public behaviour and improving work environments within the country. Stable career opportunities, facilitated through social

innovation, are essential for societal progress. In addition, the continuous improvement of social innovation is extremely important to expand business opportunities more broadly. Ensuring the well-being of the public and promoting sustainable development are core responsibilities of the Iraqi government, and are undoubtedly an integral part of effective poverty alleviation efforts.

FUTURE DIRECTIONS

The current study clearly revealed that some environmental obstacles, social innovation and sustainable development goals are already positively impacting poverty alleviation in Iraq. Without a doubt, this contributes significantly to existing knowledge. Accordingly, the Government of Iraq can comfortably formulate high-impact policies by objectively incorporating the recommendations derived from this research. However, it is noteworthy that the study's sample was confined to government sector employees. Hence, future studies should encompass broader demographics to offer fresh perspectives to the literature. Additionally, while this study relied on primary data, future research should incorporate secondary data and explore various indicators to provide robust findings that enrich the literature.

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