

Does Environmental Sustainability have any Impact on the Economic Development of a Country? A Case of Bangladesh

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ABSTRACT

Despite a quantity of studies on sustainability and economy had been performed earlier, it is still not definite that how much influence the environment creates on economy of Bangladesh. Previous studies showed the influence of environmental degradation on economic condition of Bangladesh, but not with the variables used in this existing research. This study has explored the impact of environmental sustainability on economic development of Bangladesh between 1990 and 2020. Multiple regression analysis had been performed in the study; in which dependent variable was GDP and independent variables were natural resources rents, renewable internal freshwater, air pollution and urbanization of Bangladesh. The study has contributed to realizing that there is a noteworthy connection between environmental sustainability and economic development. Regression analysis revealed that only natural resources rents have insignificant impact on economic advancement of Bangladesh; while other factors showed significant impression. The findings of the study could be beneficial for policy makers, stakeholders and other concerned authorities. The findings of the study could be beneficial for the concerned authorities to uphold ecological balance as well as economic evolution of Bangladesh for future generation.

KEYWORDS: Environment, Sustainability, Impact Assessment, Economy, Bangladesh.

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1. Introduction

“Sustainability is meeting the needs of the present without compromising the ability of future generations to meet their own needs”- United Nations Brundtland Commission

The growth of a nation ominously depends on how well it is performing the economic activities. Meanwhile, a country could become a potential one by maintaining and preserving natural resources for future utilization. However, most challenging hitches for any specific nation is to construct a balance between using the resources for existing population and retaining the resources for upcoming generation. Global energy-led economic growth trajectory and depletion of resources are a predicament in maintaining the intergenerational equity while SDCs are aimed to restoring the global balance (Xue et al., 2022). Economic advancement emphasizes on rising income, growth of employment, standards of living upgradation and so on. On the other hand, environmental sustainability is one of the pillars of sustainability that ensures low carbon or other GHG emissions, suitable upholding of ecosystems, usage of renewable energy, consumption of fresh water and many more. Improving environmental quality through reducing emissions is the central pillar of climate change mitigation and achieving SDGs (Tuspekova and Raihan, 2022).

Although economic development and environmental sustainability are conscientious to shape the future of the country; these two needles impose conflicting goals on a nation’s entire progress because of high interdependency. A study performed by (Ruggerio, 2021) found that the concept of sustainable development is often associated with the concept of sustainability. Comprehensively, industrialization, technological encroachment, urbanization- all of these have been considered the driving powers of economic development. Meanwhile, they also lead to environmental degradation such as carbon emission increases, deforestation, air pollution, damage of biodiversity, imbalanced ecology. Thus, global warming has become one of the major issues around the world. In addition, it is distressing millions of people, animal and trees by producing negative consequences such as rising sea levels, extreme weather events and pollution. Due to shifts in optimum temperature ranges climate change has also put the integrity and survival of many species at stake, thereby accelerating biodiversity loss by altering the ecosystem structures (Abbass et al., 2022).

As a less developed country, Bangladesh needs to be aware of environmental degradation, ecological balance and its consequences on economic development. So, this study has embattled to scrutinize the influence of environmental sustainability on economy of Bangladesh by using multiple regression of SPSS version 22.

The situation of environmental sustainability has become a rising concern for Bangladesh and other developing nations. In response to this untenable evolution, several global initiatives have been taken by the reputed authorities. As a developing nation, Bangladesh should concentrate on environment-friendly alternatives, which can be done through the introduction of a green economy to achieve a sustainably developed economy (Hasan et al., 2023). Still, developing or less

developed countries with reducing quantity of natural resources are suffering due to adopting the protective measures. For instance, the economic success of Bangladesh has come at an environmental cost as the steady growth of GDP largely depends on mechanization, suburbanization, sectorial development such as agriculture and textiles. All of these are responsible for carbon dioxide emission, environmental contamination and degradation of natural stores. The capital city of Bangladesh Dhaka, often ranks as the most polluted city globally. In addition, the country is highly vulnerable to climate change due to its geographical location. However, Bangladesh has numerous resources that can be exploited to produce renewable energy (Raihan et al., 2022). Recently, motivation towards environmental sustainability as well as green economy in Bangladesh have gained attention because of founding solar home system. Renewable energy consumption reduces ecological footprint and is crucial to achieving the 50% reduction target of global emissions by 2050 (Destek and Sinha, 2020). Also, Bangladesh has been able to provide renewable energy to its rural areas. By achieving a steadiness between economic maturity and ecological sustainability, it is possible to create a world of harmonization where people could live a healthier life. Thus, the study has established its first research question:

RQ 1: How much interconnection exists between economic growth and environmental sustainability of Bangladesh?

Researcher has acquired Environmental Sustainability as the independent variable (IV) and Economic Development as the dependent variable (DV). For measuring economic development, the current study has considered Gross Domestic Product (GDP); meanwhile natural resources rents, renewable internal freshwater, air pollution and urbanization- these four indicators have been contemplated for weighing environmental sustainability. The researcher has included these indicators because they are appropriate according to the inclusive context of Bangladesh. Gross domestic product (GDP) is an economic portrait that refers to the comprehensive monetary or market value of all the completed goods and services produced within a country in a certain time period. (Fernando, 2025). According to World Economics Research (2025), Bangladesh's GDP was around \$2.089 trillion in 2024 and expected to be of \$2.183 trillion in 2025. However, the rising sea levels as well as carbon dioxide emissions are also the major concerns in recent era for changing global economic scenario as the consequences are very detrimental to the atmosphere (Hoa et al., 2024). By discharging this harmful gas, environmental dilapidation has been stirring which ultimately is fluctuating the economic growth of a country (Ali and Mujahid, 2024). In 2022, around 109075300 tons CO₂ emissions were experienced by Bangladesh which increased by 3.57% over the previous year (Worldometer, 2025).

Another crucial issue is consumption of natural resources for which it has been focused to use solar, wind, biomass, hydroelectricity and so on to reduce the pressure on fossil fuels. Since energy sector plays one of the central roles in any country's economic progress, renewable energy has been marked as the best energy source because of its environment friendly feature (Garba and Rahman, 2024). For Bangladesh, it has been aimed to attain 10% of electricity production from

renewable foundations in 2030 (Zaman, 2023). However, Income from natural reserves is one of the major sources of financing for government of a country. Rent form natural resources are needful for the economic prosperity for which both developed and developing countries try to natural resources (Islam et al., 2023). Russia, Kuwait, Colombia are the countries with the highest ratios in this case whereas several advanced economies such

as Australia, France, Finland, Germany, Italy, Hong Kong, New Zealand and Japan have low ratios of natural resources rents (Canh, 2020). In Bangladesh, the average value for natural resource rents was 0.77% from 1970 to 2017, where minimum was 0.26% in 1971 and maximum was 2.48% in 1977 (Islam et al., 2022). Bangladesh is known as an agriculture-based and water-intensive nation for which the obtainability of renewable internal freshwater is diligently related to the economic constancy. Bangladesh has access to 1,105.64 cubic kilometers of renewable water from groundwater and transboundary rivers providing the country a total of 1,210.64 cubic kilometers of renewable water resources (Water Action Hub, 2025). With the mounting of textiles industries and RMG sectors, demand for water is increasing. Thus, careful consideration should be set to maintain the sustainable environment by using renewable internal freshwater resources.

According to Simionescu et al. (2022), over the earlier century, worldwide production and business have long-drawn-out and standards of living have levitated in many portions of the world- Bangladesh is not different in this case. Despite all the benefits, economic development has become a major reason of air pollution. Although environmental degradation occurs because of air pollution, it has serious impact on economic state of the country (Afifa et al., 2024). Another paper written by Andrei et al. (2024), focused on the relationship between air pollution and economic welfare of urban areas. They found that issues related to air pollution in any specific area will demotivate the people to stay in that place which ultimately hampers economic activities. Now-a-days, urbanization has become another red-hot concern that changes economic state of any country as it is related to the production process, innovation and social progress. Mismanagement of urbanization procedure could lead to a vulnerable condition of a country. Eventually, the research has created its second research question:

RQ 2: Which factors of environmental sustainability are noteworthy to create influence on economic condition of Bangladesh?

Thus, this study has illustrated the association between Environmental Sustainability and economic progress in Bangladesh. The research has contributed on evaluating how much impression each indicator of environmental sustainability (natural resources rents, renewable internal freshwater, air pollution and urbanization) has shaped the economic advancement of Bangladesh. By using a quantitative approach, this research has measured the entire situation thoroughly which could contribute both on ecological system and economic progress of Bangladesh.

2. Literature Review

The concept of “development” is always contentious as there are endless arguments and conversations behind it (Panth, 2020). For which, to outline “economic development” is not an unpretentious chore. Still, there are some definitions provided by the scholars around the world to shape the meaning and scope of economic development. In a broader sense, economic progress is a structural renovation with the support of modern technology and other instruments for improving several factors such employment, labor productivity, income level, standard of living and so on (Krueger and Myint, 2016). However, Rostow's Stages of Growth model; one of the most classic theories from 20th century has expressed five steps that to become a country as economically developed: traditional society, preconditions to take-off, take-off, drive to maturity, and age of high mass consumption (Rostow, 1960). According to World Economic Situation and Prospects (2014), there are three groups by which countries are alienated: developed economies, economies in transition and developing economies (United Nations, 2014).

As economic advancement is highly associated towards the standard of living, we could conclude that all the poverty related variables are interrelated to economic development (Barbajic et al., 2022). Thus, per capita income (PCY), Gross National Product GNP, full employment, normative values, human status, physical quality of life index (PQLI), human development index (HDI), poverty index- these are the measurement of economic development (Panth, 2020). In addition, research and development activities, industrialization and green financing are accountable for calculating economic progress (Fang et al., 2022). Moreover, ICT infrastructure and financial inclusion have been used as a reflection of quantifying the progress of economy of any nation (Awa and Kadre, 2024). According to World Bank (2025), investment, consumption, international business and trade, government budget, supply of money, balance of payments, savings as well as income- these are the determining variables for economic development (WDI, 2025).

Apart from all of these indicators to comprehend the economic form, gross domestic product (GDP) is the most popular, frequent and well-known aspect for the scholars (World Bank; 2025; Fernando, 2025; Balbaa, 2024; Ziberi et al., 2022). In the field of core economics, GDP has been well-thought-out as one of the best pointers to observe economic activities (Bryniuk, 2023). It has been thought that GDP could provide the accurate information regarding the performance of any specific country for a fixed period of time (Bryniuk, 2023). According to Fagan (2022), GDP expresses whether the economy of any nation is escalating or not in comparison to others (Fagan, 2022). Boyd (2007) stated that GDP is the greatest reflection of any economy in terms of its' visibility and influence (Boyd, 2007).

Environmental contamination and survival of individuals are the prime challenges for upcoming days as adulteration of reserves are unfavorably upsetting human lives (Ahmed et al., 2022). Recently, confirming a sense of balance between economic development and ecological security has been appeared as a key apprehension for governments of developed and developing countries around the world (Jahanger et al., 2022). For that reason, a number of countries are trying to maintain their pollution level to create an environment approachable world (Hunjra et al., 2024). For developing countries, the relationship between environmental harmony and economic progress policies is more complex (Mpfu, 2022). The thought behind this convolution is to upturn the nationwide income as well as standards of living by the government of developing economies

(Antoniades et al., 2020). Unfortunately, if any country tries to progress economically, they would focus on industrialization and urbanization that ultimately creates a threat for sustainability of the environment (Hussain and Zhou, 2022).

There are a number of papers written by researchers to identify the influential factors for maintaining environmental sustainability. Urbanization, industrialization, agricultural progress and demographic growth are some of the major responsible factors for ecological degradation (Ahmed et al., 2022). Another study conducted by Hunjra et al. (2024) stated that FDI has positive and significant impact on environmental contamination as carbon emission increases. However, Continuous development, lack of regulations, deforestation, urbanization, reducing natural habitat, decreasing biodiversity, industrial activity, air pollution and water pollution are some of the responsible factors for environmental degradation (Andin, 2024). A study performed by Kinda (2021) stated that mining and rising energy consumption have significantly influence the environmental sustainability. In addition, industries engaged in extraction of natural resources, energy-intensive production sectors as well as dependence on fossil fuels are some factors playing role in environmental degradation (Guevara, 2022).

Yu (2023) performed a study on several developing countries where natural resources rents had favorable impact for several countries such as India and Pakistan. In addition, this indicator has negative impact on economic progress for some nations like Afghanistan, Sri Lanka and Nepal (Yu, 2023). Another research paper also revealed that natural resources rents have impact on economic growth of resource-abundant countries (Ben-Salha et al. 2021). On the other hand, Dangal (2021) explored a significant as well as negative relationship between GDP and natural resources rents in Nepal. However, human capitals, man-made and natural resources are driving factors of economic development of any country where natural resources showed positive and significant impact in the short run for Sudan (Mohamed, 2020). Moreover, Kadir et al. (2024) explored in their study that there is a close association between economic growth and natural resources rents in African countries.

H1: There is a significant relationship between economic development and natural resources rents.

Clean water is constantly essential for economic advancement, ensuring public health, balance of ecological system and so on (Campoli et al., 2024). For sustainable development of any country, water managing is crucial as well as clean water is badly needed for production activities and revenues (Smol, 2022). As clean water resources is one of the key influences of circular economy, wastewater has been considering a new source of clean water for economic, social and environmental benefits (Tortajada, 2020). As acceptable sanitation is one of the foremost concerns for production as well as development activities (Pangestuti et al., 2020), decision about water resources will play a fundamental role to determine the sustainability of the country (Milan, 2017). Ngobeni and Breitenbach (2021) also focused on water resources to ensure the economic development and sustainable growth of any nation. However, renewable internal freshwater is one of the driving issues that reduces carbon emissions and help to progress economically of any state (Guermazi, 2025).

H2: There is a significant association between economic development and renewable internal freshwater.

According to Afifa et al. (2024), a cross-disciplinary association exist among the change in air condition and sustainable life pattern which gradually influence the economic state of a country. Industrial activities, burning fossil fuels, energy utilization are some of the key economic proceedings that are contributing air pollution (Munsif et al., 2021). Economic advancement could be easier for industrialization; unfortunately, this situation leads to air pollution as harmful fumes as well as substances emanate (Afifa et al., 2024). However, corporate investment is one of the major parts of economy which has been negatively affected for air pollution of a country because of regulatory uncertainties and operational risks (Zhou, 2024). Moreover, change in economic condition entails complexities of environmental degradation such as air pollution (Chen and Chen, 2021). Also, Jiang et al. (2022) performed a study where it had been shown that the deterioration of air quality creates damage on sustainability of a country. In addition, India; one of the emerging countries, economic growth and air pollution are closely related where many other factors are involved such as healthcare expenditure (Vyas et al., 2023).

H3: There is a significant association between economic development and air pollution.

It is a general believe that urbanization has a positive impact on economic progress of a country (Henderson, 2000; Liu et al., 2024). Different research performed by scholars and academicians have stated that influence of urbanization depends on the level of income a population (Liu et al., 2024). According to Li et al (2021), urbanization has a massive impression on economic growth and construction on low-income countries. On the other hand, urbanization showed a contributory relationship with economic progress for middle-income countries and two-way causal association with economic foundation for high-income countries (Zhan et al., 2022). Another study performed by Singh et al. (2025) based on BRICS nations showed that South Africa and India have a long-term connection between economic progress and urbanization which is absent for other countries such as China, Russia and Brazil. However, urbanization, economic development and sustainable development have positive connection for infrastructural condition of a country (Pandey et al., 2025). In addition, urbanization plays a significant role for the growth of economy through tourism establishment (Tan et al., 2025).

H4: There is a significant association between economic development and urbanization.

From the literature survey, it has been observed that different environmental forces have impact on economic situation of a country. Thus, the study has focused on the influence of environmental sustainability on economic development of Bangladesh.

3. Objectives of the Study

The major objective of the study was to evaluate the link between economic progress and environmental sustainability of Bangladesh. Apart from this vital objective, there are several secondary objectives which include:

- i. To analyze the impact of natural resources rents, renewable internal freshwater, air pollution and urbanization on the GDP of the country.

- ii. To investigate which indicators of environmental sustainability are playing significant role in succeeding in the economy of the country.
- iii. To evaluate the factors of environmental sustainability that are not noteworthy in varying the economic state of the country.

4. Research Methodology

The study has adopted quantitative nature where all the data were collected from secondary sources. Quantitative research could be able to afford a methodological way to observe and explore any specific phenomena by using numerical data (Zyoud et al., 2024). In this study, time series data from 1990 to 2020 were used to illustrate the inclusive scenario applicably. The duration between 1990 to 2020 has been selected because of availability and approachability. All the data had been collected from the website of World Bank; which means secondary data were arranged to develop the research paper.

Table-1: Dependent and Independent Variables of the Study

Aspects	Measuring Variables	Types of Variables	Unit	Source (Website)
Economic Development	Gross Domestic Product (GDP)	Dependent	Per Capita (USD)	World Bank
Environmental Sustainability	Natural Resources Rents	Independent	Percentage of GDP	World Bank
	Air Pollution	Independent	Micrograms per cubic meter	World Bank
	Urbanization	Independent	Annual Growth (%)	World Bank
	Renewable Internal Freshwater	Independent	Cubic Meter Per Capita	World Bank

To analyze the congregated data, multiple linear regression has been performed by using both SPSS (Li and Fan, 2023). Multiple linear regression is accurate and precise method to evaluate the relationship of each individual factor with the output (Marill, 2022). For measuring economic progress, “GDP” was preferred as dependent variable reserved from earlier literature. In addition, from extensive literature review, a number of variables were taken for considering as the dimension of environmental sustainability. They are: carbon emission, renewable internal freshwater, air pollution, urbanization, renewable energy consumption, energy intensity, natural resources rents and water productivity.

Firstly, all the data were being normalized as they existed in different scales. After that, “stationary” and “assumptions” were checked respectively for accomplishing the multiple linear regression of the chosen data series. To evaluate stationary in time series data, Augmented Dickey-Fuller (ADF) test was performed in the study (Roza et al., 2022). In ADF test, one of the variables “carbon emission” failed to satisfy the requirement. However, the assumptions included: independence, linearity, homoscedasticity, normality of residuals and absence of multicollinearity. Among all of

these variables, renewable energy consumption, energy intensity and water productivity violated one or more assumptions. Then, log transformation was used for dependent variable “GDP” to improve the model used in the study. Finally, the linear regression was performed to illustrate the link between economic development and environmental sustainability of Bangladesh.

5. Conceptual Framework

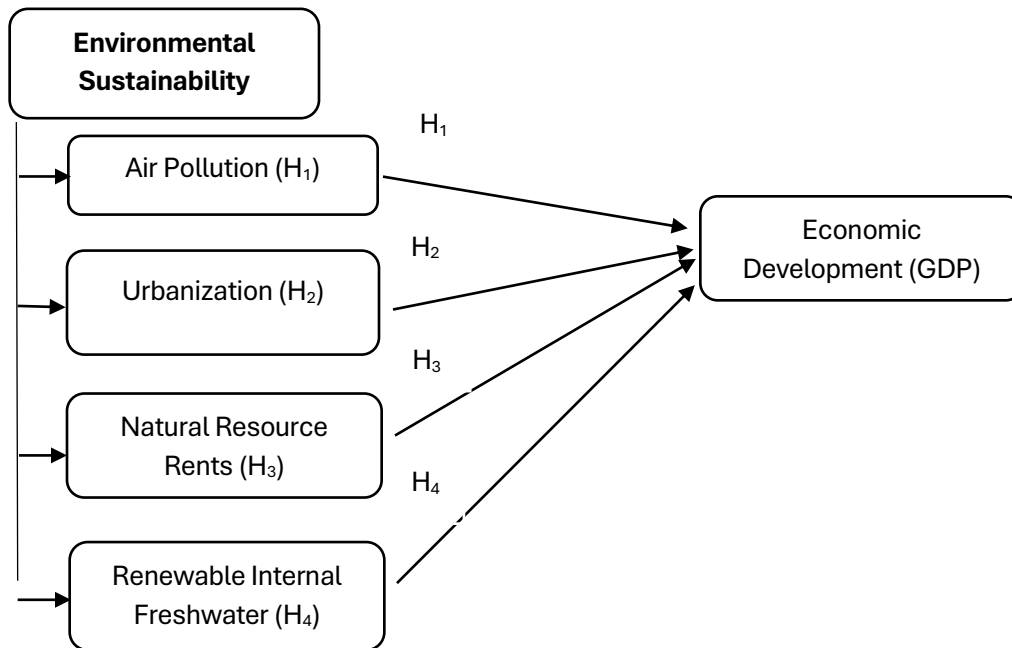


Figure-1: Conceptual Model (Author's Compilation)

6. Scope of the Study

The current research blazes a trail by exploring the impression of environmental sustainability on economic growth of Bangladesh. The study has selected Bangladesh because of its conceivable economic progression as well as environmental mortification that has been observed by the environment specialists around the world. Although, environmental sustainability has a number of variables observed from previous literature, but the researcher integrated only four measuring indicators such as natural resources rents, renewable internal freshwater, air pollution and urbanization. In addition, the study has used time series data from 1990 to 2020 collected from World Bank.

7. Data Analysis and Findings

The model used in this study has been given below:

- **Dependent variable**— Log transformed GDP per capita
- **Independent variables**—Natural resource rents, Renewable internal freshwater, Air pollution and Urbanization

$$\ln Y = \beta_0 + \beta_{1\Delta}X_1 + \beta_{2\Delta}X_2 + \beta_{3\Delta}X_3 + \beta_{4\Delta}X_4 + \epsilon$$

Multiple Linear Regression has been conducted at a 95% confidence level (level of significance is 0.05).

Table-02: Result Summary of The Multiple Linear Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.890 ^a	.792	.759	.10376
Predictors: (Constant), durbanization, internalfreshwater, dairpollution, dnaturalresourcerents				
Dependent Variable: lgdp				

In the table mentioned above showed the estimated value which specifies the statistical model fit between the dependent variable and the independent variables. Estimated values provide 0.792 of coefficient of multiple determination, indicating 79.2% of the variance in the independent variables (environmental sustainability) is explained by the dependent variable (GDP). Significance level ($p < 0.001$) and the f-statistic value 23.816 with Goodness of fit indicate that the combined impact of all the predictors of the model on the dependent variable (GDP) is statistically significant. Confirmation of the model reliability evident by significance level at 1%.

Table-03: Value of Coefficients (Beta) of The Predictors

Predictors	Unstandardized Beta	Standardized Beta	Significance
Natural resource rents	-.064	-.041	*.676
Renewable internal freshwater	-.541	-.723	.001
PM2.5 air pollution	-.407	-.308	.004
Urbanization	1.678	.305	.001

The negative coefficient with a high p-value implies an insignificant influence on economic growth. Thus, increasing resource rents trends are weakly associated with a declining GDP in Bangladesh. Moreover, a unit increase in renewable internal freshwater is linked with a -0.723 unit decrease in economic growth. Statistically, renewable internal freshwater is a highly significant influencer on economic growth, but it is counterintuitive in this model, which is common in a developing economy like Bangladesh. In addition, air pollution weakens productivity through health issues, breathing problem, high mortality, labor inefficiency, reducing agricultural yields and so on. However, in case of urbanization, it is considered as a powerhouse to economic development it fosters innovation, infrastructural development, productivity, investments and many more. In this study, the economic value of urbanization is positively as well as significantly associated with GDP growth.

Table- 04: Value of Pearson Correlation of The Predictors

	Lgdp	dnatural resource rents	renewable internal freshwater	dPM2.5 air pollution	Durbanization
Lgdp	1.000				
dnatural resource rents	-.307	1.000			
renewable internal freshwater	-.785	.182	1.000		
dPM2.5 air pollution	-.328	.193	.131	1.000	
Durbanization	.316	-.213	-.041	.236	1.000

Table- 05: ANOVA Analysis Generated by SPSS

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.026	4	.256	23.816	.001 ^b
	Residual	.269	25	.011		
	Total	1.295	29			
Dependent Variable: lgdp						
Predictors: (Constant), durbanization, internalfereshwater, dairpollution, dnaturalresourcerents						

Table- 06: Interpretive Summary of the Predictors Source

Predictor	Observed Direction	Significance	Strength	Hypotheses
Natural resource rents	Negative	Not significant (0.676)	Weak (-0.041)	Not Supported
Renewable internal freshwater	Negative	Significant (<0.001)	Strong (-0.723)	Supported
PM2.5 Air pollution	Negative	Significant (0.004)	Moderate -0.308)	Supported
Urbanization	Positive	Significant (0.001)	Moderate (0.305)	Supported

Table- 06 illustrates inclusive summary of the data analysis part of this research where natural resource rents showed insignificant impact on economic progress of Bangladesh as p-value is more than 0.05. For this reason, strength and direction of relationship are not noteworthy in this manner. Moreover, renewable internal freshwater, air pollution and urbanization have significant association with economic growth of Bangladesh as p- value stated less than 0.05. Among three of them, renewable internal freshwater showed strong negative relationship with GDP (-0.723). Also,

air pollution has significant impression but the relation between air pollution and GDP is moderate (-0.308). In addition, urbanization has moderate impact but positive influence on GDP of Bangladesh.

The result is different from the research articles performed earlier related to this subject area. In China, environmental taxation, renewable energy, green innovation- these are motivating factors towards green economic activities (Sun et al., 2025). On the other hand, green innovation and green investment have substantial involvement on the ecological stability of European countries (Caglar et al., 2024). Also, renewable energy, green technology innovation, economic growth and financial globalization have mentionable impact on ecology of European nations (Radmehr et al., 2024). However, in Germany, population and economic progress reduce environmental pollution; whereas energy use creates vice versa situation (Erdogan, 2024). Thus, the existing research paper is unlike to the other articles as it delivers inimitable consequences of the analysis.

8. Conclusion, Implications, and Limitations of the Study

9.1 Conclusion

The relationship between environment and economy is complex as well as context-dependent. The research has highlighted the impression that could be created by environmental sustainability on economic progression of Bangladesh. The study has found several key concerns that could not be unheeded. Firstly, natural resource rents have insignificant impact on economic development of Bangladesh. Secondly, all the other variables such as air pollution, urbanization and renewable internal freshwater have significant effects on economic progress of Bangladesh. Finally, among these factors, only urbanization showed positive relation with economic condition of Bangladesh. Thus, by counting these findings, proper collaboration, policy making and innovation process should be continued to maintain environmental protection and economic prosperity.

9.2 Implications

The upshots of this study could be useful for both theoretical and practical sectors in Bangladesh. For theoretical matters, this study could place a complex back-and-forth between ecological balance and economic progress of Bangladesh. Besides this reason, the study has also addressed which environmental factors are desperate to change the economic situation of Bangladesh. Thus, the study can be supportive in setting literature for further academic and research activities.

In practical area, the research has noteworthy influence on sustainable development of Bangladesh. Sustainable Development Goals (SDGs); established by United Nations, where 17 goals have been engrossed for adopting by the nations to lead a healthy life. The observations of the study support SDG6, SDG7 (Affordable and Clean Energy), SDG8 (Decent Work and Economic Growth), SDG11 (Sustainable Cities and Communities), SDG13 (Climate Action) and SDG15 (Life on Land). The outcomes of the research are beneficial to generate and widen the knowledge focusing ecological balance, urbanization, freshwater resources, income from natural resources, air pollution and so on. In the upcoming years, researchers could enlarge their scrutiny procedure based on the confines of this study. Moreover, the results of the study might also be helpful to

support the “Green Growth” of Bangladesh which has become a burning issue now a day. In addition, investors, global agencies and other concerned authorities might be facilitated by using the research outcomes for their professional purposes.

9.3 Limitations

Despite the fact that the present research generated extensive practical findings in the case of Bangladesh, our investigation has some errors that might be detected in future research activities. One of the flaws is that the study has taken time series data ranging from 1990 to 2020. By considering more data, the study could provide more accurate and representative output. Another drawback is, GDP is not the only economic indicator for understanding the contexts of the country. In addition, there are a number of dynamics for environmental sustainability. Unfortunately, the research has considered only few factors for the scrutiny purpose.

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Conflicts of Interest

The authors declare no conflict of interest.

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Appendix-1: Dependent and Independent Variables of Research

Year	GDP	Natural resource rents	Renewable internal freshwater	Air pollution	Urbanization
1990	0.005559	0.157868	1.000	0.421106	1.000
1991	0.01	0.105216	0.942428	0.413488	0.931825
1992	0.07	0.129233	0.886699	0.40754	0.909815
1993	0.04	0.064438	0.832646	0.403237	0.890915
1994	0.03	0.080035	0.779833	0.400551	0.883567
1995	0.018916	0.142022	0.727877	0.399457	0.887053
1996	0.050513	0.07103	0.677699	0.40032	0.861224
1997	0.05424	0.01	0.627751	0.403323	0.882978
1998	0.057443	0.023989	0.577817	0.408168	0.912456
1999	0.058697	0.137304	0.528519	0.414557	0.922338
2000	0.063035	0.37138	0.481971	0.42219	0.860605
2001	0.062016	0.396011	0.440245	0.434793	0.723408
2002	0.061626	0.580827	0.402225	0.452441	0.617808
2003	0.07825	0.595551	0.36691	0.469356	0.542468
2004	0.092852	0.665468	0.334331	0.479762	0.462291
2005	0.105232	0.819577	0.304559	0.477883	0.37602
2006	0.110443	1.000	0.277468	0.421816	0.290935
2007	0.134506	0.692311	0.25265	0.302505	0.217797
2008	0.172501	0.661487	0.229852	0.163439	0.151778
2009	0.205964	0.613565	0.208778	0.048108	0.094869
2010	0.24551	0.814537	0.189133	0.01	0.047526
2011	0.285955	0.97075	0.168953	0.387332	0.074887
2012	0.297258	0.93937	0.147864	0.879076	0.117499
2013	0.347128	0.576657	0.127409	0.848967	0.100441
2014	0.416027	0.482575	0.10773	1.000	0.077146
2015	0.481753	0.349902	0.0886	0.838746	0.06231
2016	0.696696	0.184544	0.069668	0.822314	0.061124
2017	0.778545	0.179393	0.051775	0.618473	0.025622
2018	0.856531	0.124313	0.034655	0.663166	0.01
2019	0.939775	0.11394	0.01715	0.313559	0.021769
2020	1.000	0.044753	0.01	0.008504	0.013131