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Analysis of Effects on Environmental Deterioration and Its Societal Consequences Using SPSS

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Abstract

Environmental degradation refers to the loss of Earth's natural resources, which include air, water, soil, and other biodegradable and nonbiodegradable components. Some of the most damaging human actions to the environment are deforestation, urbanisation, industrialization, and population growth. Automobiles and companies emit more hazardous gases, which contributes to the worsening. To prevent illegal conduct and mitigate its long-term consequences, governments must close legal gaps. The destruction of natural ecosystems and socioeconomic inequalities have far-reaching detrimental consequences for human health. Overpopulation, pollution, deforestation, climate change, unsustainable agricultural practices, excessive consumerism, wealth disparity, corporate domination, debt problems in developing nations, and militarism are all contributing issues. The effects include an unstable global situation, increased poverty, overcrowding, malnutrition, severe weather, species extinction, medical crises (both short and long-term), wars, and breaches of human rights. Because of their scientific expertise and socioeconomic status, doctors are well positioned to detect and react to these events at all levels, from patient interactions to service and intervention. Environmental economics has become a central theme in the arguments of the green movement due to the intricate relationship between environmental and economic problems. Researchers in both developed and developing countries have investigated the possible health benefits of cleaner air. Improving air quality and giving access to clean water for drinking and bathing, sanitation, and power might help achieve the Millennium Development Goals of health, development, and environmental sustainability. This study, which reviews environmental risk reduction studies, examines the causes and consequences of socioeconomic inequality and environmental deterioration on a national and global scale. It focuses on addressing climate change, increasing water quality, and lowering air pollution.

Keywords: Environmental degradation, Manmade impacts, Mitigation, Pollution

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1. Introduction

We have vast expertise in this environment. It encompasses all of the components that make up our environment and influence our ability to maintain life on our planet [1]. Pollution, biodiversity loss, animal extinction, deforestation, desertification, global warming, and a slew of other difficulties are all part of environmental degradation, a huge worldwide issue. When resources such as air, water, soil, plants, animals, and all other living and nonliving things on Earth are exhausted, the ecosystem deteriorates, a process known as environmental degradation [2, 3]. Environmental degradation has also had some good consequences, such as the production of more new genes and the expansion or contraction of certain species. According to natural selection, organisms evolve in response to environmental changes, with human activity serving as the primary driving force behind these changeGiven that humans also originate from the earth, natural replacement has become the new norm [4].]. Almost three-quarters of the population earns a livelihood from resource-based activities, while the remaining quarter utilises these resources in some form, whether for food, fuel, industrial output, or pleasure. India's natural resources, especially its ecology, suffer significant damage. Fertiliser usage in agriculture is a major source of soil erosion, salinity, and overall fertility loss on farms, lowering crop production quality [5, 6]. Water for drinking and agriculture is becoming increasingly scarce and contaminated as a result of surface water contamination and overexploitation of groundwater aquifers in many dry and semiarid areas. Air quality is deteriorating, and fishing yields are declining. The alarming increase in pollution levels across all three habitats endangers human health and longevity. To promote economic growth and development, it is essential to practice effective environmental management. Some believe it is just a luxury for wealthy countries concerned with appearance; however, this is not always the case. Climate change and environmental degradation have an influence on all countries' development strategies [7–9]. If development agencies aim to help reduce poverty in the places where they work, they must consider the environmental and climatic hazards that may harm their activities. Rapid climate change and environmental degradation are already having an effect on numerous populations in developingHe revealed that slowing the pace of population growth could account for 16–29% of emissions reductions, and that this action would be required by 2050 to avert catastrophic climate change. ate change. According to his study in 35 countries, slowing population growth might help mitigate climate change by lowering yearly carbon emissions by 1.4 to 2.5 billion metric tonnes by 2050. Environmental degradation and socioeconomic inequality have the most catastrophic global health consequences for humans and populations. They work hand in hand. This research discusses environmental deterioration and social inequality, as well as their causes and effects at the national and global levels. Several factors contribute to these challenges: Overpopulation, contaminated air and water, deforestation, increasing temperatures, unsustainable fishing and farming practices, excessive consumerism (or "affluenza"), uneven wealth distribution, the development of companies, debt problems in emerging nations, wars, and militarism. Poverty, overcrowding, malnutrition, severe weather, species loss, chronic and acute illnesses, human rights abuses, violence, and a world in a state of permanent instability that heralds Malthusian anarchy and disaster are all possible consequences [10, 11]. Most international governments have prioritized self-interest or survival above environmental change, resulting in a decline in internal stability and a health-care crisis. Physicians are uniquely positioned to recognise the causes and consequences of environmental degradation and social injustice, from their interactions with individual patients to their participation in volunteerism, service, and intervention in areas of great need, as well as direct political activism and involvement [12–15]. We have vast expertise in this environment. Everything around us affects our ability to maintain life on Earth. Pollution, biodiversity loss, animal extinction, desertification and deforestation, climate change, and other issues are serious concerns worldwide [16]. Pollutants in the air, water, soil, plants, animals, and all other living and nonliving things on Earth contribute to resource depletion-induced environmental degradation. Environmental degradation has also had some good consequences, such as the production of more new genes and the expansion or contraction of certain species. According to natural selection, organisms evolve in response to environmental changes, with human activity serving as the primary driving force behind these changes. This shift is to natural replacement, since people are also a product of nature. Almost three-quarters of the population earns a livelihood from resource-based activities, while the remaining quarter utilises these resources in some form, whether for food, fuel, industrial output, or pleasure. The vast bulk of India's natural resources, particularly its ecology, are badly damaged. The use of agricultural fertiliser causes soil erosion, salinity, and general loss of fertility on agricultural land, all of which impair crop production quality [17–23]. Water for drinking and agriculture is becoming increasingly scarce and contaminated as a result of surface water contamination and overexploitation of groundwater aquifers in many dry and semi-arid areas. Air quality is deteriorating, and fishing yields are declining. The alarming increase in pollution levels across all three habitats endangers human health and longevity. To promote economic growth and development, it is essential to practice effective environmental management. Some believe it is just a luxury for wealthy countries concerned with appearance; however, this is not always the case. Climate change and environmental degradation have an influence on all forms of development in every nation. If development agencies aim to help reduce poverty in the places where they work, they must consider the environmental and climatic hazards that may harm their activities. Rapid climate change and environmental degradation growth could account for 16–29% of emissions reductions, and that this action would be required by 2050 to avert catastrophic climate change. He discovered that decreasing population growth might help solve the climate catastrophe by 2050, saving 1.4 to 2.5 billion metric tonnes of carbon emissions annually. He conducted his investigation in 35 countries [25].

2. Causes of Environmental Degradation

Certain environmental life forms need large areas of land to provide food, shelter, and other requirements. These creatures are area-specific. As the biome divides, vast amounts of livable space disappear. Animals are having a tougher time collecting the materials they need for life. According to http://www.conserve-energy-future.com/causes-and-effects-of-environmental-degradation.php, the ecosystem persists even in the absence of plant and life.

From everything we've discussed so far, it's evident that a healthy ecosystem is critical to the existence of all kinds of life on Earth. Nonetheless, environmental damage remains unabated. We occasionally hear warnings about the deteriorating environment and the potential issues it may cause, including climate change, rising sea levels, a water crisis, less productive farmland, and an increase in illnesses. To avert future environmental harm, fast action is essential. To begin, we must understand what causes environmental degradation in order to plan for its mitigation. The elements listed below are the most crucial ones:

2.1 Social Factors

- 1. **Population Growth:** Rapid population growth increases the demand for natural resources such as water, land, and energy. More people means greater consumption, leading to over-exploitation of resources, increased waste, and higher levels of pollution.
- 2. **Urbanization:** The movement of people from rural to urban areas often results in the expansion of cities. This urban sprawl can lead to the destruction of natural habitats, increased air and water pollution, and the creation of heat islands.
- 3. **Poverty:** In many developing countries, poverty forces people to exploit natural resources unsustainably. For instance, communities may rely on deforestation for firewood or agriculture, or overfish local waters, leading to resource depletion and habitat destruction.
- 4. **Consumerism:** High levels of consumption, particularly in developed countries, drive the extraction and use of natural resources at unsustainable rates. The production and disposal of consumer goods contribute significantly to pollution and waste.
- 5. Lack of Education and Awareness: When people are not educated about the importance of environmental conservation, they may not recognize the long-term impacts of their actions. Lack of awareness can lead to harmful practices such as littering, improper waste disposal, and unsustainable agricultural practices.
- 6. **Cultural Practices:** Some traditional practices can lead to environmental degradation. For example, certain agricultural techniques, hunting practices, or rituals may harm ecosystems. Balancing cultural traditions with sustainable practices is a challenge in many areas.
- 7. **Inequality and Injustice:** Social inequality often leads to environmental injustice, where marginalized communities bear the brunt of environmental degradation. These communities may lack the political power

to oppose harmful activities such as industrial pollution or deforestation, leading to disproportionate environmental impacts.

- 8. **Migration and Displacement:** Environmental degradation can lead to displacement and migration, which in turn can put pressure on the environments of receiving areas. Refugee populations, for example, might overuse local resources in their new locations.
- 9. **Policy and Governance:** Weak environmental regulations and poor governance can exacerbate environmental degradation. Corruption, lack of enforcement, and inadequate policies often allow harmful practices to continue unchecked.
- 10. Economic Activities: Economic pursuits like mining, agriculture, and manufacturing often prioritize shortterm gains over long-term sustainability. This focus can result in practices that degrade the environment, such as overuse of fertilizers, deforestation, and pollution from industrial processes.



Fig. 1. Social Factors

2.2 Economic Factors

- 1. **Industrialization**: The growth of industries often leads to pollution and resource depletion. Factories emit pollutants into the air and water, and industrial processes can generate large amounts of waste. Heavy reliance on fossil fuels for energy in industrial sectors also contributes to greenhouse gas emissions.
- 2. Agricultural Practices: Modern agriculture relies heavily on chemical fertilizers, pesticides, and large-scale monoculture, which can lead to soil degradation, water pollution, and loss of biodiversity. Additionally, deforestation for agricultural expansion reduces carbon sinks and disrupts ecosystems.
- 3. **Resource Extraction**: Activities such as mining, logging, and drilling for oil and gas lead to significant environmental degradation. These activities often result in habitat destruction, soil erosion, water contamination, and increased carbon emissions.
- 4. **Economic Growth and Consumerism**: The pursuit of economic growth often prioritizes short-term gains over long-term sustainability. High levels of consumption and waste generation are driven by

consumerist lifestyles, especially in developed countries, leading to overexploitation of natural resources and increased pollution.

- 5. **Global Trade**: The globalization of trade has led to increased transportation of goods, contributing to greenhouse gas emissions. Additionally, the demand for cheap products can drive environmentally harmful practices in producing countries, such as deforestation for palm oil plantations or overfishing.
- 6. **Market Failures**: Environmental degradation can result from market failures where the true environmental costs of economic activities are not reflected in prices. Externalities, such as pollution, are often not accounted for, leading to overconsumption and environmental harm.
- 7. **Subsidies and Incentives**: Government subsidies for fossil fuels, agriculture, and fishing can encourage unsustainable practices. These subsidies often lead to overproduction and overexploitation of resources, contributing to environmental degradation.
- 8. Lack of Investment in Sustainable Practices: Insufficient investment in renewable energy, sustainable agriculture, and green technologies can hinder efforts to reduce environmental degradation. Economic systems that favor traditional, unsustainable practices over innovative, sustainable solutions exacerbate environmental problems.
- 9. Urbanization and Infrastructure Development: Rapid urbanization and infrastructure development, driven by economic growth, can lead to habitat destruction, increased pollution, and higher energy consumption. The construction of roads, buildings, and other infrastructure often results in significant environmental impact.
- 10. **Tourism**: While tourism can provide economic benefits, it can also lead to environmental degradation if not managed sustainably. Over-tourism can strain local resources, generate waste, and damage natural and cultural sites.



Fig. 2. Economic Factors

2.3 Other Factors

1. **Technological Advances**: While technology can offer solutions to environmental problems, it can also lead to increased resource extraction and pollution. For example, advancements in drilling and mining technologies have made it easier to exploit previously inaccessible resources, leading to habitat destruction and pollution.

- 2. **Political Factors**: Government policies and political decisions can significantly impact the environment. Weak environmental regulations, lack of enforcement, and political instability can hinder efforts to protect the environment. Additionally, political priorities that favor economic growth over environmental protection can exacerbate degradation.
- 3. **Climate Change**: Climate change, driven by human activities such as burning fossil fuels and deforestation, leads to global warming, sea-level rise, and extreme weather events. These changes can degrade ecosystems, disrupt biodiversity, and impact water and food security.
- 4. Land Use Changes: The conversion of natural landscapes into agricultural land, urban areas, or infrastructure can lead to habitat loss, fragmentation, and decreased biodiversity. Deforestation, wetland drainage, and the conversion of grasslands are significant contributors to environmental degradation.
- 5. **Natural Disasters**: Events such as hurricanes, floods, wildfires, and earthquakes can cause immediate and severe environmental damage. While these events are natural, human activities like deforestation and climate change can increase their frequency and severity, exacerbating their impact.
- 6. **Water Mismanagement**: Overuse and pollution of water resources can lead to degradation of freshwater ecosystems. Industrial discharge, agricultural runoff, and inadequate wastewater treatment can contaminate water bodies, harming aquatic life and reducing water quality for human use.
- 7. **Waste Management Issues**: Improper disposal of waste, including plastic, electronic waste, and hazardous materials, leads to soil and water contamination. Landfills, especially those not managed properly, can leak pollutants into the environment and contribute to greenhouse gas emissions.
- 8. **Invasive Species**: The introduction of non-native species to new environments, whether intentional or accidental, can disrupt local ecosystems. Invasive species can outcompete native species for resources, alter habitats, and introduce new diseases, leading to biodiversity loss.
- 9. **Overexploitation of Resources**: Unsustainable harvesting of natural resources, including overfishing, hunting, and logging, leads to depletion of wildlife populations and degradation of ecosystems. This overexploitation can result in the collapse of ecological systems and loss of biodiversity.
- 10. **Cultural Attitudes and Practices**: Cultural beliefs and practices can sometimes contribute to environmental degradation. For example, traditional practices that rely on natural resource extraction without sustainable management can lead to long-term damage.
- 11. Scientific and Technical Knowledge Gaps: Lack of understanding about environmental processes and the long-term impacts of human activities can lead to inadequate or misguided efforts to manage natural resources sustainably. This gap can hinder effective conservation and restoration initiatives.
- 12. **Globalization**: The interconnectedness of global economies can lead to environmental degradation in multiple ways, such as through the spread of invasive species, increased carbon emissions from transportation, and the global demand for cheap natural resources driving unsustainable practices in producing countries.



Fig. 3. Others Factors

3. Effects of Environmental Degradation

3.1 Impact on Human Health:

Environmental degradation may have a harmful influence on human health. Pneumonia and asthma are examples of respiratory problems that may occur in areas with high levels of air pollution. The indirect repercussions of air pollution are believed to have killed millions of people.

3.2 Loss of Biodiversity:

Biodiversity has a crucial role in preserving ecological balance by battling pollutants, recovering nutrients, safeguarding water supplies, and stabilising climate. Deforestation, global warming, overcrowding, and pollution are a few of the leading drivers of biodiversity loss.

3.3 Ozone Layer Depletion:

The ozone layer protects the world from damaging UV radiation. The presence of chlorofluorocarbons and hydro chlorofluorocarbons in the atmosphere causes the ozone layer to decrease. As it depletes, it will send hazardous radiations back into the environment.

3.4 Loss for Tourism Industry:

The degradation of the environment may be a significant setback for the tourism sector, which depends on travellers for its survival. Environmental deterioration, such as loss of green cover, biodiversity, massive landfills, and increasing air and water pollution, may be a major turnoff for most visitors.

3.5 Economic Impact:

The substantial costs that a nation may have to bear as a result of environmental degradation may have a significant economic effect in terms of green cover restoration, landfill cleanup, and endangered species conservation. The economic effect might also include the loss of the tourist sector. As we can see, there are many factors that might have an impact on the ecosystem. If we are not vigilant, we risk contributing to global environmental destruction. We can, however, take action to stop it and protect the world in which we live by providing environmental education to people, which will help them become more familiar with their surroundings, allowing them to address environmental concerns and make the world more useful and protected for our children and future generations.

3.6. Implications of environmental Degradation on society

The destruction of the environment is consequently a severe issue. And it is mostly the result of excessive and irresponsible exploitation, as well as improper natural resource management. Indeed, it has arisen as a worldwide problem for all governments throughout the globe. As previously noted, contamination of the air, water, and soil caused by the emission of dangerous gases, the discharge of industrial effluents, urban and radioactive wastes, and the careless use of fertilisers and pesticides endangers the very existence of contemporary civilization. If you read the information below, you may realise how terrible environmental deterioration.

4. Methodology

We conducted an online poll to learn about the causes of environmental deterioration. A survey that was both comprehensive and easy was developed. There are two sections to the survey. The first section evaluates the survey results, while the second section looks into the variables that contribute to environmental deterioration. A Likert scale ranging from 1 to 5 is enough for any assessment. Respondents included company owners, designers, site engineers, builders, and quantity surveyors. The survey was sent to businesses, non-profit organisations, and academic institutions. Some were unclear of what to do, while others provided inadequate responses. We reviewed 253 survey forms; 18 were not examined further due to incomplete information. The results were gathered from all replies. There were 253 responses to the survey. We investigated all of the data using structural equation modelling (SEM). The PLS technique uses evaluation and structural equations. Internal models demonstrate the connections between components. Following that, we do SPSS factor analyses. A structured questionnaire was used to identify the variables contributing to project delays. Participants in the poll came from all walks of life and worked in a variety of professions, including construction, transportation, and manufacturing. Respondents provided identifying information (e.g., project job title and years of experience) and used a Likert scale to score the relevance and frequency of different reasons of delays. Furthermore, by asking open-ended questions, participants were able to offer more extensive and informative assessments of their experiences with project delays. The data were examined using both qualitative and quantitative methodologies, such as factor analysis and descriptive statistics. By examining project delays from all perspectives, this comprehensive approach shed light on their complexities and paved the path for more focused methods to management and mitigation.

5. Result and Discussion

5.1 DATA ANALYSIS

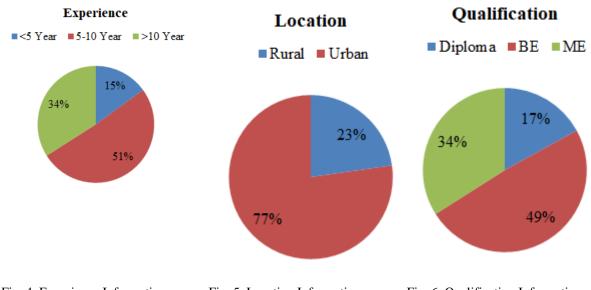


Fig. 4. Experience Information

Fig. 5. Location Information

Fig. 6. Qualification Information

PLS-SEM was used to further evaluate factors influencing the causes of environmental degradation. PLS-SEM was chosen over other relapse approaches because it can account for dependent and free-parts multi-collinearity. Several interdependent subordinate connections are studied using the multivariate PLS-SEM model, which incorporates straight relapses and factor reduction. The structural model [15] estimates the link by evaluating the route diagram and noting all relevant components. Causal modelling is the outcome of integrating regression and route analysis. Compared to conventional PLS-based models, the equation model offers three major advantages [16,17]. Such are the folks. Covariance-based procedures, unlike PLS techniques, evaluate four or more constructs. When assessing survey data that does not follow a normal distribution, the PLS approach excels. Interaction effects are taken into consideration, and measurement errors are rectified using PLS.

Code	Social Factors	Factor	α
		loading	
C1	Population Growth	0.7199	0.8481
C2	Urbanization	0.8334	0.8764
C3	Poverty	0.7892	0.8456
C4	Consumerism	0.597	0.9272
C5	Lack of Education and Awareness	0.6021	0.9278
C6	Cultural Practices	0.787	0.9388
C7	Inequality and Injustice	0.5832	0.8372
C8	Migration and Displacement	0.6889	0.9353
C9	Policy and Governance	0.7669	0.935
C10	Economic Activities	0.8634	0.835
	Economic Factors		
D1	Industrialization	0.7105	0.8488
D2	Agricultural Practices	0.824	0.8771
D3	Resource Extraction	0.7798	0.8463
D4	Economic Growth and Consumerism	0.5876	0.9279
D5	Global Trade	0.5927	0.9285
D6	Market Failures	0.7776	0.9395
D7	Subsidies and Incentives	0.5738	0.8379
D8	Lack of Investment in Sustainable Practices	0.6795	0.936
D9	Urbanization and Infrastructure Development	0.7575	0.9357

Table 1. Causes of Environmental Degradation with factor loadings and Cronbach's alpha

D10	Tourism	0.854	0.8357
	Others Factors		
E1	Technological Advances	0.8232	0.8761
E2	Political Factors	0.779	0.8453
E3	Climate Change	0.5868	0.9269
E4	Land Use Changes	0.5919	0.9275
E5	Natural Disasters	0.7768	0.9385
E6	Water Mismanagement	0.6787	0.935
E7	Waste Management Issues	0.7567	0.9347
E8	Invasive Species	0.5738	0.8379
E9	Overexploitation of Resources	0.6795	0.936
E10	Cultural Attitudes and Practices	0.7575	0.9357
E11	Scientific and Technical Knowledge Gaps	0.5738	0.8379
E12	Globalization	0.6795	0.936

After the reliability analysis, the study's internal consistency is assessed using a correctness or fineness assessment. Cronbach's alpha was calculated to be 0.816. This means that it exceeds the standard requirement of 0.7. After that, assessing dependability is permitted since it is legitimate. Table 1. The document includes every single impact statistic. The conclusion is that the survey results may be believed.

5.2 Model Fit and Quality Indices

In most circumstances, the APC is 0.929. A route coefficient greater than 0.90 indicates an excellent and outstanding match. R2 is 0.944. Statistically, R2 is always between zero and one hundred percent. When the response variable is set to 0%, the model does not evaluate the dispersion around the mean. The dependent variable's mean predicts both the dependent variables and the regression model. If the model covers the whole range of values for the response variables around the mean, it will fit the data well. A high R2 score indicates that the regression model fits the data well. A GoF of 0.145 implies that the model fits the data exactly. The goodness-of-fit (GOF) measure checks the model's accuracy against the experimental data. On a scale of 0 to 1, a GOF value of 0.10 is classified as low, 0.25% as medium, and 0.3% as big. A well-fitting model exemplifies a basic but effective model. Spewness and Kurtosis Use descriptive statistics to determine the differences between skewness and kurtosis. SEM allows for skewness or kurtosis values ranging from -3 to -3.

5.3 Relative Importance Index

The eleven survey responses were extensively reviewed using SPSS to get further information. Table 2 uses the Relative Importance Index (RII) to rank components in order of predicted criticality based on condition (2). We

researched how the coronavirus affected the new company. RII = W/(A*N), where 0 equals 1. W stood for "weight," and respondents rated it from 1 to 5, with 1 meaning "strongly disagree" and 5 indicating "strongly agree." There were N responses, with the highest being 5.

Code	Social Factors	RII	Rank
C1	Population Growth	0.945	1
C5	Lack of Education and Awareness	0.743	2
C3	Poverty	0.884	3
C8	Migration and Displacement	0.666	4
C2	Urbanization	0.938	5
С9	Policy and Governance	0.645	6
C10	Economic Activities	0.632	7
C4	Consumerism	0.878	8
C6	Cultural Practices	0.712	9
C7	Inequality and Injustice	0.702	10
Economic	Factors		
D8	Lack of Investment in Sustainable Practices	0.666	1
D2	Agricultural Practices	0.938	2
D1	Industrialization	0.945	3
D4	Economic Growth and Consumerism	0.878	4
D9	Urbanization and Infrastructure Development	0.645	5
D7	Subsidies and Incentives	0.702	6
D10	Tourism	0.632	7
D3	Resource Extraction	0.884	8
D6	Market Failures	0.712	9
D5	Global Trade	0.743	10

Table 2. Relative Importance Index for causes

Others Factors			
E7	Waste Management Issues	0.702	1
E10	Cultural Attitudes and Practices	0.632	2
E4	Land Use Changes	0.878	3
E5	Natural Disasters	0.743	4
E3	Climate Change	0.884	5
E1	Technological Advances	0.945	6
E8	Invasive Species	0.666	7
E11	Scientific and Technical Knowledge Gaps	0.621	8
E6	Water Mismanagement	0.712	9
E12	Globalization	0.6192	10
E2	Political Factors	0.938	11
E9	Overexploitation of Resources	0.645	12

5.4 Thus, the fourt most affected Social Factors by the **Causes of Environmental Degradation** have been identified by the factor analysis. Below are several ways they may be categorized.

- 1. Lack of Education and Awareness
- 2. Population Growth
- 3. Migration and Displacement
- 4. Urbanization

5.5 Thus, the fourt most affected Economic Factors by the **Causes of Environmental Degradation** have been identified by the factor analysis. Below are several ways they may be categorized.

- 1. Lack of Investment in Sustainable Practices
- 2. Industrialization
- 3. Economic Growth and Consumerism
- 4. Urbanization and Infrastructure Development

5.6 Thus, the fourt most affected others Factors by the **Causes of Environmental Degradation** have been identified by the factor analysis. Below are several ways they may be categorized.

- 1. Waste Management Issues
- 2. Land Use Changes
- 3. Climate Change
- 4. Globalization

6. Result and Discussion SPSS Analysis

6.1 Reliability Statistics

The reliability of the sample size was checked using SPSS. Table 3 displays the value (as calculated by SPSS).

Cronbach's	Based on	No.
Alpha	Standardized	of
	Items, Cronbach's	Items
	Alpha	
0.844	0.684	32

Possible values range from 0 to 1. The fact that the value of "" in this example is 0.844, which is more than 0.6 and extremely near to one, indicates that the sample size is enough and the questionnaire is trustworthy enough to make conclusions from.

6.2 Feasibility of Factor Analysis Data

The acceptability of the factor analysis findings was assessed using sample adequacy metrics such as the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test. If the survey questionnaire meets Bartlett's Test of Sphericity, it may be utilised for factor analysis.

Kaiser-Meyer-Olkin Measure of	0.755
Sampling Adequacy	
Bartlett's Test of Sphericity	1725.514
Approx. Chi-Square	
df	244
Sig.	.000

Table 4. KMO and the Bartlett Test (SPSS Output)

The KMO statistic value is 0.715, and 0 KMO/1 is usually bigger than 0.5. Because of this, factor analysis is considered a valid approach to factor analysis. Also, for factor analysis and data usability, it makes sure that variables are homogenous. A statistically significant p-value (Sig. The result of 0.005 indicates that the factor analysis is suitable for the given collection of variables.

6.3 How to Stop Degradation

Stopping degradation requires a multifaceted approach encompassing policy changes, technological innovations, and societal shifts. Firstly, stringent environmental regulations must be implemented to curb activities contributing to degradation, such as deforestation and industrial pollution. Simultaneously, investment in sustainable practices, like renewable energy sources and regenerative agriculture, can mitigate further damage. Education and awareness campaigns play a crucial role in fostering a culture of conservation and responsible consumption. Additionally, fostering international cooperation and adopting a holistic view towards ecosystems can address degradation on a global scale, ensuring a sustainable future for generations to come. There are ways which we can help to decrease degradation in our environment. Some of these include: Purchase recycled products, Conserve water, Do not litter or toss waste into inappropriate places, Conserve energy, Join an

awareness group, Talk with others about the impacts of environmental degradation and Be an advocate to save our planet.

7. Conclusion

Environmental degradation is an important environmental issue. Damage levels determine whether ecosystems can ever completely recover. These lands will never again be home to indigenous vegetation and wildlife. Overexploitation of natural resources, rapid population growth, and economic development are the primary reasons behind India's deteriorating environment. If city planners, corporations, and resource managers wish to reduce the effect of growth in the future, they must all consider how it will influence the environment over time. Some of India's worst environmental catastrophes include habitat destruction, biodiversity loss, soil erosion, deforestation, and land degradation. Economic growth and changing consumer preferences have boosted both energy consumption and transportation activities. Water scarcity, noise, and air pollution are the most significant environmental challenges in India. According to the World Bank, between 1995 and 2010, India improved its environmental quality and handled environmental concerns at one of the fastest rates in the world. However, India still has a long way to go before its environmental quality reaches that of developed countries. We can all help limit the pace of environmental degradation. Finishing the legal system is the most effective strategy to control pollution and depletion. The existing judicial system has several problems and even actively encourages misbehaviour. As a result, the government should do more to address the legal loopholes that encourage illegal activity. Overexploitation is the principal driver of biodiversity loss; hence, reforms to natural resource extraction policies are urgently required. The government has been underutilizing its long-standing ideas for social and economic solutions to pollution. It will require several initiatives to repair our ecology and eliminate environmental pollution. To attain the national long-term environmental objective and achieve sustainable development, authorities at all levels must engage in policy creation as well as implementation and supervision. To encourage forestation, the government might implement a system of financial incentives and punishments. Here are some ways you may assist the environment: Purchase recycled items, minimise water use, prevent littering and incorrect garbage disposal, save energy, join an awareness organisation, educate people about the repercussions of environmental degradation, and fight for the preservation of our planet. Increase requirements for potable water. Avoid the haphazard use of alternate, unauthorised sources. Increase the availability and quality of water. Make it easy to obtain and use for domestic needs. Improve personal hygiene. Different organisations should implement strict restrictions to limit the release of contaminants into water sources. Take precautions to prevent an oil spill. We should convert hazardous chemicals into safe, biodegradable molecules instead of discharging them into rivers. Incinerators equipped with water pollution prevention measures should burn the refuse. We do this for two reasons: first, to increase the public's understanding of air pollution and its effects, and second, to enhance the efficiency of fuel-burning equipment. Ventilation control: Every house should install a sufficient ventilation system in the kitchen to quickly exhaust gases generated by the combustion of wood, coal, oil, and so on. Vehicle regulations should ensure that the engine completely burns gasoline. Forestation: Parks and public places should plant trees to reduce air pollution.

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