

## Challenges in Implementing Environmental Laws and Policies in India

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### Abstract

This study explores the implementation challenges of environmental laws and policies in India. It reveals the difficulties and problems associated with breaking environmental laws and regulations in India. This study's primary goal is to list the several obstacles India must overcome in order to put environmental laws and policies into effect. A review of the literature of this study provides other points and topics that are aimed to be discussed. The importance of maintaining rules, issues for violating the rules, challenges faced during implementation, and strategies that may help mitigate the problems are discussed. Some theories may help to solve the issues. People are surveyed using the primary data collecting approach in order to obtain general data. Primary data is gathered from non-manipulable sources that do not exist. The data was analysed using the primary quantitative research approach. The secondary data were gathered from various books, newspapers, journals, and articles on Google Scholar. Thirteen questions and fifty-five surveys to gather people's opinions have been analysed using the SPSS program. A thorough explanation is dotted with statistical data. The difficulties encountered, parallels and divergences between the findings and the literature study are discussed. Demand for natural resources and food supplies is another effect of overpopulation. Humans must use natural resources in order to satisfy their needs. Amidst all of this, it is also evident that regulations and limits are ineffective because individuals are not abiding by them. Ultimately, it may be said that corruption, overpopulation, ignorance, and poor education are the key reasons for India's difficulties in implementing environmental laws and policies.



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### Keywords

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Corruption;  
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Violation.

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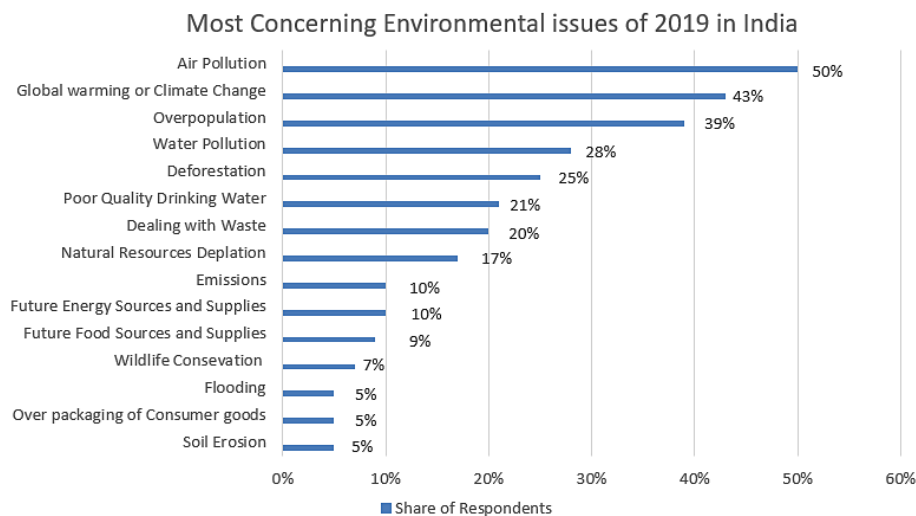
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## Introduction

Environmental protection now falls under fundamental law in India. Every person's right to live in a pollution-free environment is safeguarded under the Indian constitution. Even if they are sound, it may need much labour to execute and enforce rules and regulations. The sustainability of the Earth is in danger due to the irresponsible use of the environment by humans. Hence, environmental preservation is essential. Because of this, every country makes laws and regulations in addition to guidelines to preserve their unique national settings. In dia's ecological policies encompass a range of laws and results to make the environment sustainable for future generations (Bhuvaneshwari

*et al.*, 2019).<sup>1</sup> Article 51-A requires everyone to preserve and enhance the environment's many natural resources, such as lakes, rivers, woods, and wildlife. It is also necessary to consider all living organisms in the natural environment. India is already facing issues related to the environment due to different issues in managing resources. The rough use of natural resources and non-renewable resources is creating an impact on future energy resources. As per the points of Malav *et al.* (2020),<sup>2</sup> the policies related to the Nature Conservation Act are not being followed by the people and therefore, issues are being created. According to a survey, the most crucial issue is air pollution, which has been mentioned by 50 percent of the people.



**Fig. 1: Most concerning environmental issues of 2019 in India**

(Source: statsista.com, 2023)

Global warming and the issue related to climate change and its third impact are seen by 48% of the people. Overpopulation and their use of resources are also significant issues that have been mentioned by 39% of the people (statista.com, 2023).<sup>3</sup> Matters related to deforestation, issues of drinking water, manageable wastage products, and flooding issues are also being found as issues in nature. It is true that some people might not be as concerned about the future consequences that could affect the environment and their sustainability. There could be a number of reasons for this, including ignorance, the need to attend to urgent matters first, or the conviction that small actions won't make a big difference.

It's crucial to remember, though, that there are a large number of people, groups, and communities throughout the world who have a solid commitment to sustainability and are actively trying to lessen the effects of climate change and other environmental problems. They are aware that the decisions we make now could have a significant effect on the planet in the future. These are creating a significant impact on nature, and therefore, citizens must strictly follow policies to ensure a sustainable life for the future and the next generation. The main objective of the research is to identify the different issues that have come up in India as a result of the application of environmental laws and regulations.

**The Research's Objectives Include****RO1**

To know the importance of different environmental laws and policies that the Indian Government makes to conserve nature.

**RO2**

To find the challenges faced in India in maintaining and regulating the rules and issues related to environmental policies.

**RO3**

To find the negative impact of the challenges facing implementing the rules and regulations related to the environment in India.

**RO4**

To make strategies that may help mitigate the issues and challenges faced when implementing the rules and regulations of the environment in India.

**The Questions of this Research are Stated Below****RQ1**

What is the importance of different environmental laws and policies made by the Indian Government for conserving nature?

**RQ2**

What are the challenges faced in India in maintaining and regulating the rules and issues related to the environment?

**RQ3**

What are the negative impacts of the challenges facing implementing the rules and regulations related to the environment in India?

**RQ4**

What strategies may help mitigate the issues and challenges faced when implementing the rules and regulations of the environment in India?

**The Hypothesis of the Research is****H<sub>1</sub>**

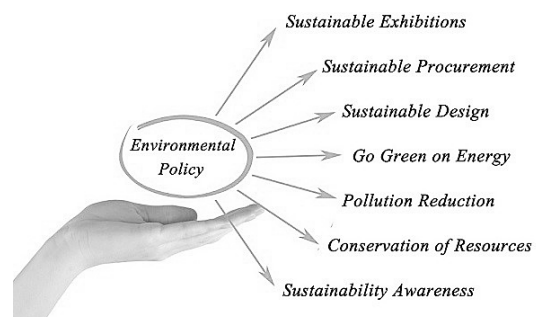
There are many challenges to implementing different environmental laws and programmes in India.

**H<sub>0</sub>**

There is no challenge to implementing different environmental laws and programmes in India.

Environmental laws and regulations in India are too strong, but there is very little obedience from the people. A court handles and deals with different types of environmental cases. As per the Environmental Performance Index, India is high in pollution globally (Sharma *et al.*, 2020).<sup>4</sup> Different types of laws related to the environment face different types of challenges to implementation. As per the rapid and high industrialisation, increment in population with high index, deforestation, lack of knowledge and education among the people about the environment, it is being faced with issues for implementing the rules of the environment. Therefore, natural resources have been decreasing at a terrifying rate, creating a significant issue.

One of the main reasons for implementing the rules is related to the environment. Due to excessive interference of the Government, no power to work freely is also a reason for facing issues with the implementation of the environmental rules. Lack of awareness among people and education about laws and increasing demand for industrialisation are the main reasons for facing issues in implementing environmental policies in India (Zhang *et al.*, 2020).<sup>5</sup> This study will focus on the issues that are faced with the implementation of environmental laws in India. This research will be helpful to know the issues and, as per the issues, strategies should be taken by the people in a significant way. Therefore, the issues for implementation of environmental laws will be helpful.

**Literature Review****Importance of Different Environmental Laws and Policies**

**Fig. 2: Importance of conservation of natural resources**

(Source: Gupta, Soni & Kumar 2019)

Environmental laws and policies are made to maintain air, water, forests, and other natural resources. Humans depend on natural resources to sustain their lives; however, using them carelessly endangers their lives. As per the insights of Gupta, Soni, and Kumar (2019),<sup>6</sup> negligence of rules and policies to maintain the balance of natural resources may create outstanding issues for people. On the other hand, disobeying the rules, laws, and policies related to the environment may cause punishments like fines and jail time (Farooq *et al.*, 2019).<sup>7</sup> Environmental laws and

policies are the only treatment steps for people using the environment poorly.

### **The Challenges of Putting India's Environmental Rules and Policies into Practice**

The main challenge faced when implementing the environmental laws in India is related to poor coordination among the Government agencies. As per the views of Manda & Ben Dhaou (2019),<sup>8</sup> the capacity of the institutions is also poor, and their instruments, technologies, and arrangements are also not managed by the government.



**Fig. 3: Reasons for facing issues in the implementation of environmental policies and laws in India**

(Source: Campos & Reich, 2019)

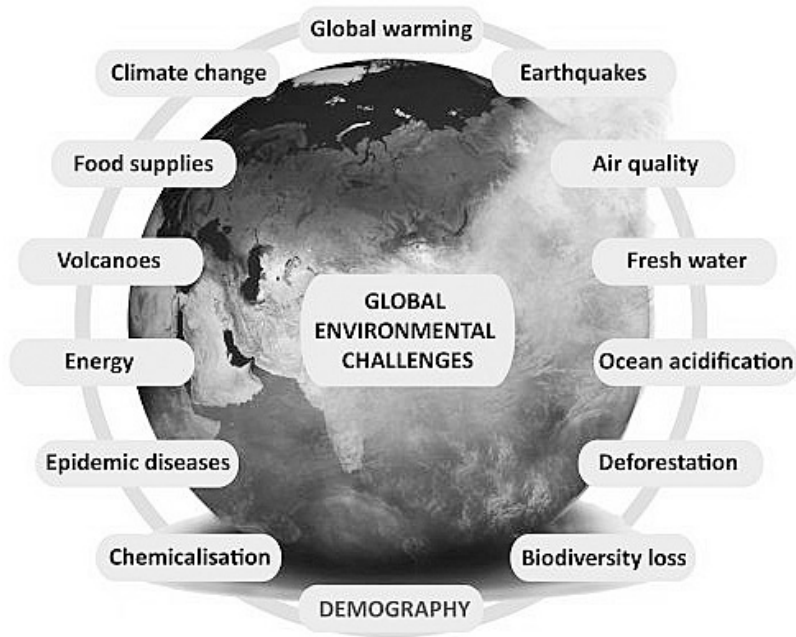
Corruption among the high designation ministers is also an issue. Industrialists are not maintaining the rules for their business, and they are not getting punished for violating environmental laws. On the other hand, it can be said critically that lack of awareness and education among people and the demand for money are also creating issues for implementing laws (Campos & Reich, 2019).<sup>9</sup> People are not thinking about the near future; they are only thinking about the present. The main issues in India are the lack of money and not being afraid or lack of education to know what is waiting in the future.

### **The Negative Impact of the Challenges for the Implementation of Environmental Laws**

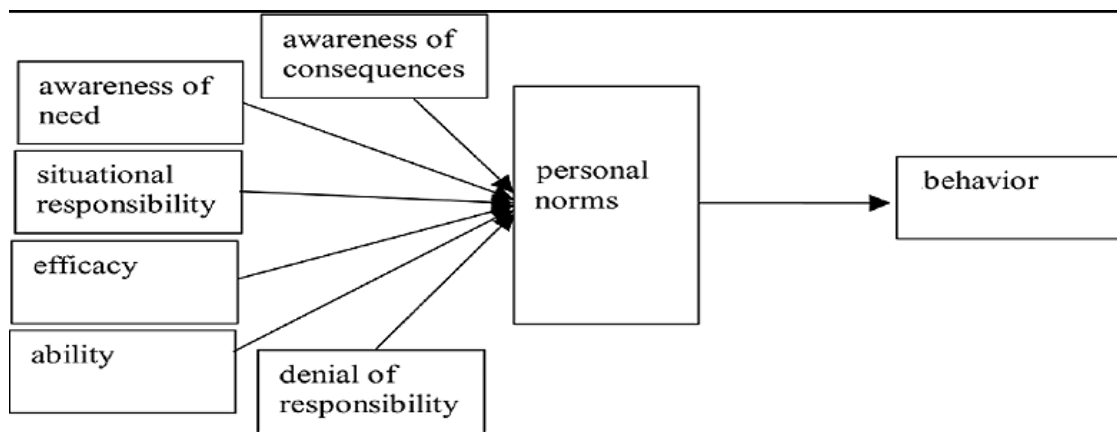
As issues with implementing environmental policies are faced, a list of issues is being created in India. The most critical issue that is being created is air pollution, and it has been seen that India is the third largest country, contributing 2.65 billion metric tons of carbon into the air. As per the views of Abalansa *et al.* (2021),<sup>10</sup> around the earth, air and water have been polluted to such a level that 70% of the surface-level water is unfit for consumption. The weather balance has also been devised. Too much heat in

summer and too much rain in no time also creates issues. There are heat waves and issues in many places. Floods have also been faced several times due to deforestation and the cutting of trees. The

agricultural lands are facing droughts, and these are only because of not obeying rules and environmental policies (fortunejournals.com, 2023.).<sup>11</sup>



**Fig. 4: Negative impact on the environment for disobeying rules**  
(Source: Abalansa *et al.* 2021)



**Fig. 5: Norm Activation Model**  
(Source: Meng *et al.* 2020)

**Strategies May Help Mitigate the Laws and Rules or Policies Related to the Environment**

The government should be stricter, and there should not be any corruption to allow for the immediacy of

rules. As per the insights, the government should take steps that violate the environment's rules and policies. People should be provided with more environmental education so they can also participate

in this mission (earth.org, 2023).<sup>12</sup> Workshops and programs should be done to make people more aware of the future of the next generation. People should understand the root causes of natural devastation. On the other hand, people should be supportive of managing the issues, and industrialists must decrease their lust for money, which is the leading cause of all types of pollution (Bhuvaneshwari *et al.*, 2019).<sup>13</sup>

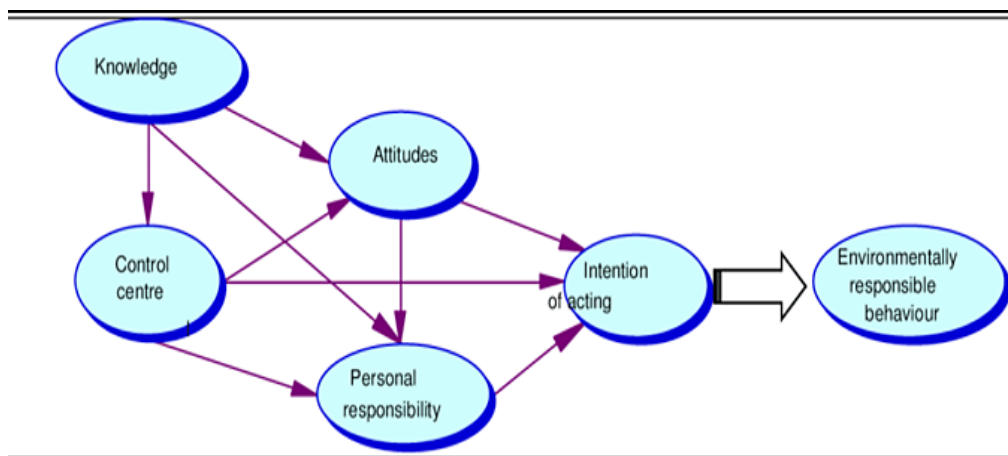
Pollution control boards should be stricter to manage the total situation properly. Maintenance of rules and regulations and punishment for the people violating the rules may help implement the environmental rules. Schools and colleges should provide proper education to help students become more aware of nature (Sharma & Das, 2020).<sup>14</sup> Rewards and benefits should be given with the help of NGOs.

Ultimately, the tree plantation program should be done at any cost and introduced into the people's ordinary lives.

### Theoretical Framework

#### Norm Activation Model

"The Norm Activation Model" was derived by Schwartz (1977)<sup>15</sup> and was helpful for the identification of the drivers that may influence the human intention for nature. It can be defined as social behaviour that can create an impact on others. Personal behaviour has a great help in reducing the destructive performance and effects on the natural system that is shared in multiple shares of behaviours (Meng *et al.*, 2020).<sup>16</sup> With the help of this model, people should become softer with the environment, which should help make the planet more sustainable.



**Fig. 6: Theory of environmentally Response Behavior**  
(Source: Wang *et al.* 2020)

### Theory of Environmentally Response Behaviour

The authors of the ERB theory are Hines, Tomera, and Hungerford (1987).<sup>17</sup> As per this theory, one cannot take responsibility for the environment. It is the total work of the people to maintain the environment. Knowledge of the rules and regulations of the environment can help others to know about them. Being influenced by their act, some others may be desired to act as this may help to implement the laws and results related to the environment (Wang *et al.*, 2020).<sup>18</sup>

### Methodology

In the methodology, the primary quantitative research method is used with the help of fifty-five surveys to get unbiased results. The positivist philosophy of the resource has been used in the present research to get the scientific analysis of collected data. On the other hand, the challenges faced by the people in implementing the challenges at the time of environmental rules in India are asked of different officers, people, and agencies related to environmental conservation (Villanthenkodath &

Mahalik, 2022).<sup>19</sup> The deductive research approach was employed in this study, relying on theoretical frameworks that have significant connections to this resource. This approach can help test the knowledge of the policies that are gathered to conclude. It is also helpful to mitigate the gaps in the research that have been faced before. Some hypotheses have to be

proved at the end of this research, the hypotheses are tested, and at the end of this research, the results are collected, and questions are made. A descriptive research design helps understand the phenomena that are useful for the study of the whole research (Bhuvaneshwari *et al.*, 2019).<sup>20</sup>

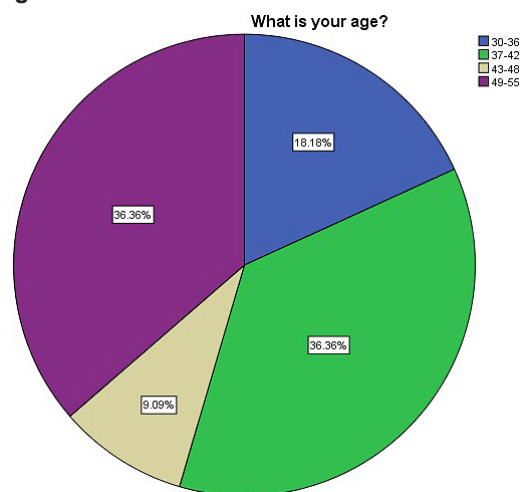


**Fig. 7: Primary quantitative data collection with survey**  
(Source: Rajamani & Peel, 2021)

The primary data collection method is followed to gather general data from people. Primary data is collected from the non-existence of sources that cannot be manipulated. These thirteen questions were asked to the officers, people and the agencies' departments related to India's environmental policies. In this study, SPSS was done with data collected from different people. This present analysis includes frequency analysis and linear regression analysis, including the model summary analysis, ANOVA test, and coefficient test. The Pearson correlation test is an excellent help in providing information about the relationship between different variables needed for this research.

The secondary data were gathered from various books, newspapers, journals, and articles on Google Scholar. All the authors' copyrights are conserved in this study.

**Finding and analysis**  
**Demographic Analysis**  
**Age**



**Fig. 8: Age Group participants**  
(Source: IBM SPSS)

During the whole research process, the researcher maintained the process of the stretch needed for the research. No people were forced to give their opinion for this survey (Rajamani & Peel, 2021).<sup>21</sup> There was no manipulation done to make their opinion biased. This was done to maintain the unbiasedness of the data. The secondary data resources used for this research are appropriately cited. The verification of the secondary data resources has not been done.



**Table 1: Age of Participants**

What is your Age?					
		Freq.	%	Valid %	Cumulative %
Valid	30-36	10	18.2	18.2	18.2
	37-42	20	36.4	36.4	54.5
	43-48	5	9.1	9.1	63.6
	49-55	20	36.4	36.4	100
	Total	55	100	100	

(Source: IBM SPSS)

**Table 2: Gender of participants**

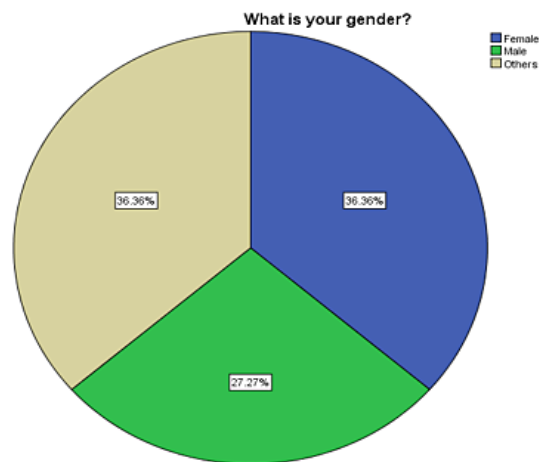
What is your Gender?					
		Freq.	%	Valid %	Cumulative %
Valid	Female	20	36.4	36.4	36.4
	Male	15	27.3	27.3	63.6
	Others	20	36.4	36.4	100
	Total	55	100	100	

(Source: IBM SPSS)

The respondents to the survey belonged to different age groups. The total respondents have been divided into four distinct age groups. The respondents between the ages of 30 and 36 were 18.2%, and The age categories of 49 to 55 and 37 to 42 accounted for the largest percentage of responders (36.4%). of the responders, just 9.1% were between the ages of 43 and 48. The respondents of different age groups helped to determine the most influential factors that impacted the research topic. The experiences of the different age groups vary, and they answered the survey questions based on their knowledge.

**Gender**

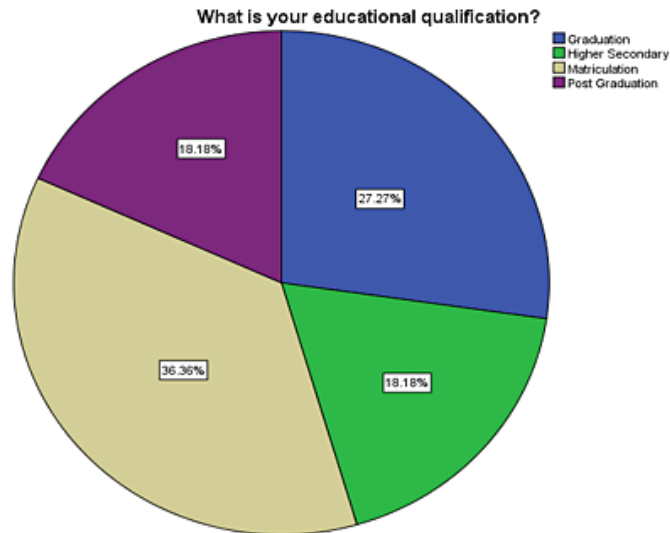
Respondents were from different genders, and all were interested in joining in the survey processes. Female and other respondents were the maximum, and they were 36.4% each. Males were only 27.3%. This demarcates that the male and female were the survey participants, which helps to get adequate knowledge about the research topic.



**Fig. 9: Gender of participants in the online survey**  
(Source: IBM SPSS)



**Educational Qualifications**



**Fig. 10: Participants' educational qualification**  
(Source: IBM SPSS)

**Table 3: Educational Qualification Analysis through Descriptive Analysis**

What is your educational qualification?		Freq.	%	Valid %	Cumulative %
Valid	Graduation	15	27.27	27.27	27.27
	Higher Secondary	10	18.18	18.18	45.45
	Matriculation	20	36.36	36.36	81.81
	Post Graduation	10	18.18	18.18	100
	Total	55	100	100	

(Source: IBM SPSS)

The educational qualification of the respondents represents their academic qualifications and theoretical knowledge. The respondents were from different educational backgrounds; 27.27% were graduates, and higher secondary passed respondents were 18.18%. The percentage of the respondents who passed the matriculation degree was 36.36%, and the postgraduate respondents were 18.18%. The respondents from different educational backgrounds adequately answer all the questions. This increases the realities of the research work as people from different educational strata have different experience levels.

**Statistical analysis**

**Descriptive Analysis**

Qualitative (Descriptive) analysis of this research helps to compare and correlate the relation between the different IVs and DV. This demarcates the standard error similar for all IVs and DV of the research. This helps to represent the Skewness and Kurtosis analysis report. The impact of various DV and IVs on the research topic is ascertained with the aid of this descriptive analysis.

**Table 4: Qualitative analysis of different variables**

Qualitative Statistics										
	N	Range	Mini <sup>m</sup>	Max <sup>m</sup>	Mean	Std. Deviation	Skewness	Kurtosis		
	Stat Figures	Stat Figures	Stat Figures	Stat Figures	Stat Figures	Stat Figures	Stat Figures	Std. Error	Stat Figures	Std. Error
Depndent Variable	55	12	03:00	15:00	12.1818	3.18614	-2.097	0.322	4.154	0.634
Independent Variable 1	55	7	08:00	15:00	13.9091	2.12806	-2.031	0.322	3.105	0.634
Independent Variable 2	55	06:00	04:00	10:00	8.9091	1.74561	-2.024	0.322	3.408	0.634
Independent Variable 3	55	06:00	04:00	10:00	8.8182	1.8165	-1.739	0.322	2.167	0.634
Valid N (List-wise)	55									

(Source: IBM SPSS)

**Hypothesis 1****Table 5: Analysis of Linear Regression**

Synopsis of the Model										
Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard Error of Approximation	R <sup>2</sup> Change	F Change	Df <sub>1</sub>	Df <sub>2</sub>	Sig. F Change	Durbin-Watson
1	.890	.792	.788	1.46557	.792	202.218	1	53	.000	1.522

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Squares	F	Sig.
1	Reg-ression	434.344	1	434.344	202.218	0
	Residual	113.838	53	2.148		
	Total	548.182	54			

**Coefficients of<sup>a</sup>**

Model	Unstandardised Coefficients of		Standardised Coefficients of	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-6.355	1.318	.890	-4.820	.000
Unchangeable IV1	1.333	.094		14.220	.000

(Source: IBM SPSS)

The significant value of the regression analysis of the variables in Hypothesis 1 is displayed in the table above. Given that this indicates a positive link between the variables in this hypothesis, the significance value

should be less than 0.005. This hypothesis has a significant value of 0, which is perfect.

**Hypothesis 2**

**Table 6: Analysis of Regressionis for Hypothesis 2**

Synopsis of the Model <sup>b</sup>										
Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard Error of Approximation	R <sup>2</sup> Change	F Change (df1)	Deg. Of freedom <sub>1</sub> (Df2)	Deg. Of freedom <sub>2</sub>	Sig. F Change	Durbin-Watson
1	.919 <sup>a</sup>	.844	.841	1.27041	.844	286.655	1	53	.000	1.273

**ANOVA<sup>a</sup>**

Model	Sum of Squares	Deg. Of freedom(Df)	Mean Squares	F	Sig.
1 Regression	462.643	1	462.643	286.655	0
Residual	85.539	53	2.148		
Total	548.182	54			

**Coefficients of<sup>a</sup>**

Model	Unstandardized Coefficients of		Standardized Coefficients of	T	Sig.
	B	Std. Error	Beta(β)		
1 (Constant)	-2.757	0.899		-3.067	0.003
IV2	1.677	0.099	0.919	16.931	0

(Source: IBM SPSS)

The relationship between the variables in this hypothesis is shown in the above table. Understanding the relationship status of the many variables in this hypothesis is made easier with the use of regression analysis. The regression's significance value of 0

indicates that there is a strong correlation between the hypothesis's independent and dependent variables.

### Hypothesis 3

**Table 7: Analysis of regression for Hypothesis 3**

Synopsis of the Model <sup>b</sup>										
Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard Error of Approximation	R <sup>2</sup> Change	F Change	Df <sub>1</sub>	Df <sub>2</sub>	Sig. F Change	Durbin-Watson
1	.870 <sup>a</sup>	.756	.752	1.58722	.756	164.597	1	53	.000	2.582

ANOVA <sup>a</sup>					
Model	Sum of Squares	Deg. Of freedom(Df)	Mean Squares	F	Sig.
1 Regression	462.643	1	462.643	286.655	0
Residual	85.539	53	2.148		
Total	548.182	54			

Coefficients of <sup>a</sup>					
Model	Unstandardized Coefficients of		Standardized Coefficients of	T	Sig.
	B	Std. Error	Beta(β)		
1 (Constant)	-1.270	1.070		-1.187	0.24
IV2	1.526	.119	0.87	12.830	.000

(Source: IBM SPSS)

The significant value of this hypothesis, or whether the variables have a positive or negative association, is shown in the above table. This hypothesis's significance value, which is zero, shows that its numerous factors have a significant and positive association with one another. A positive indicator of a positive association is defined as a significant value less than 0.005. This kind of study shows how IV actually affects the research hypothesis's DV.

The table above of correlation demarcates the relation between all IVs and DV of the research. It represents the correlation value of the IVs and DV for their interrelated relation. The higher correlation value is defined as a good indicator and represents the positive relation among the different variables of this research. Maximum correlation values are near 1, a good sign of the research. Correlation values are essential as they represent the dependency of all the variables on others.

**Table 8: Correlation test between a DV and IVs**

Pearson Correlation Test				
	Dep. Variable DV	Indep. Variable IV1	Indep. Variable IV2	Indep. Variable IV3
Dep. Variable	1	.890**	.919**	.870**
The Pearson Coefficient(Correlation)		000	000	000
Sig. (2 tailed)			0	0
N	55	55		
Dep. Variable	.890**	1	.970**	.954**
The Pearson Coefficient (Correlation)				
Sig. (2 tailed)	0		0	0
N	55	55		55
Dep. Variable	0.919	.970**	1	.958**
The Pearson Coefficient (Correlation)				
Sig. (2 tailed)	0	0		0
N	55	55	55	55
Dep. Variable	.870**	.954**	.958**	1
The Pearson Coefficient (Correlation)				
Sig. (2 tailed)	0	0	0	
N	55	55	55	55

(Source: IBM SPSS)

### Discussion

The findings confirmed that there are undoubtedly difficulties in implementing laws and regulations in India at various times. As per the literature review, it has been seen that due to the people's lack of education and awareness, the issues are faced at different times for implementing rules and regulations in India's total system. As a result, it has been seen that most of the people in India are not aware of the challenges they may face in the future if they are not rewarded with the environment at this moment. Most people are not interested in the future effects that may affect their sustainability and the planet (Elmagrhi *et al.*, 2019).<sup>22</sup>

In addition, it has been seen that corruption has proven to be an excellent tool for implementing the difficulties encountered in putting environmental laws and regulations into effect. Various unethical individuals or law enforcement officials have been

uncovered, and they have approved numerous businesses and locations that do not adhere to environmental regulations. This may hamper the environment in the future. In general, it has been observed that Abiding with the laws and policies is a matter of mindset, and this mindset evolves in the education of individuals in the initial years of schooling. Mindset is affected by the behaviours reflected by our elders; several research strengthens this statement that children adopt the behaviours of their elders, Som Tyagi,(2016)<sup>23</sup> in lectures on Existential realities or Co-Existential Philosophy. Manipulation and rough use of the industrialists have also been significant reasons for implementing environmental policies and laws (Han, 2021).<sup>24</sup> Ultimately, by making more money, the industrialists are not following the rules and regulations necessary to maintain and conserve natural resources like water and forests (Lazarus, 2023).<sup>25</sup> They are not giving too much value to the regulations and laws.

Another issue is that the government interferes too much with autonomous agencies that want to conserve nature. This also impacts the reformation of nature, which is being affected.

### Conclusion

Thus, it can be concluded that many challenges hamper the implementation of environmental policies in India. Lack of awareness about the environment and lack of education among people are the main reasons they affect and create challenges in implementing environmental policy. Most people in India do not have an awareness of the environment. Issues also make challenges, such as the interference of the Government, lack of freedom to do work, and lack of punishment for violation of rules; corruption is also the main challenge responsible for implementing the environmental rules and laws and regulations in India. Overpopulation is another factor affecting the conservation of laws and environmental policies. Overcrowdedness also causes a demand for food supplies and natural resources. People have to use

natural resources to meet their demands. During all of this, it is also being seen that the restrictions and the laws are not working as those are not followed by the people. The people are not aware of the planet's sustainability to live long. Lust for industrialisation and the people to make more money in short ways also creates violations of the people's rules. All these causes are the main challenges faced at the time of implementation of the policies and rules in India related to the environment.

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Self

### Conflict of Interest

Not Applicable

### References

1. Bhuvaneshwari, S., Hettiarachchi, H., & Meegoda, J. N. (2019). Crop residue burning in India: Policy challenges and potential solutions. *International journal of environmental research and public health*, 16(5), 832. Retrieved on 14th July 2023 from: <https://www.mdpi.com/1660-4601/16/5/832/pdf>
2. Malav, L. C., Yadav, K. K., Gupta, N., Kumar, S., Sharma, G. K., Krishnan, S., ... & Bach, Q. V. (2020). A review on municipal solid waste as a renewable source for waste-to-energy project in India: Current practices, challenges, and future opportunities. *Journal of Cleaner Production*, 277, 123227. Retrieved on 14th July 2023 from: [https://www.academia.edu/download/68024473/1\\_s2.0\\_S0959652620332728\\_main.pdf](https://www.academia.edu/download/68024473/1_s2.0_S0959652620332728_main.pdf)
3. statista.com, 2023. *Leading environmental issues in India*. Retrieved on 14th July 2023 from: <https://www.statista.com/statistics/999489/india-leading-environmental-issues/>
4. Sharma, E., & Das, S. (2020). Measuring impact of Indian ports on environment and effectiveness of remedial measures towards environmental pollution. *International Journal of Environment and Waste Management*, 25(3), 356-380. Retrieved on 14th July, 2023 from: <https://www.academia.edu/download/98078828/ijewm.2020.10629520230201-1-5a1fh9.pdf>
5. Zhang, J., Kang, L., Li, H., Ballesteros-Pérez, P., Skitmore, M., & Zuo, J. (2020). The impact of environmental regulations on urban Green innovation efficiency: The case of Xi'an. *Sustainable Cities and Society*, 57, 102123. Retrieved on 14th July, 2023 from: <https://eprints.qut.edu.au/198127/1/56883013.pdf>
6. Gupta, S., Soni, U., & Kumar, G. (2019). Green supplier selection using multi-criterion decision making under fuzzy environment: A case study in automotive industry. *Computers & Industrial Engineering*, 136, 663-680. Retrieved on 14th July, 2023 from: <https://fardapaper.ir/mohavaha/uploads/2021/06/Fardapaper-Green-supplier-selection-using-multi-criterion-decision-making-under-fuzzy-environment-A-case-study-in-automotive-industry.pdf>

7. Farooq, M. S., Riaz, S., Abid, A., Abid, K., & Naeem, M. A. (2019). A Survey on the Role of IoT in Agriculture for the Implementation of Smart Farming. *Ieee Access*, 7, 156237-156271. Retrieved on 14th July, 2023 from: <https://ieeexplore.ieee.org/iel7/6287639/6514899/08883163.pdf>
8. Manda, M. I., & Ben Dhaou, S. (2019, April). Responding to the challenges and opportunities in the 4th Industrial revolution in developing countries. In *Proceedings of the 12th international conference on theory and practice of electronic governance* (pp. 244-253). Retrieved on 14th July, 2023 from: <http://collections.unu.edu/eserv/UNU:7324/p244-Ickson-Manda.pdf>
9. Campos, P. A., & Reich, M. R. (2019). Political analysis for health policy implementation. *Health Systems & Reform*, 5(3), 224-235. Retrieved on 14th July, 2023 from: <https://www.tandfonline.com/doi/pdf/10.1080/23288604.2019.1625251>
10. Abalansa, S., El Mahradi, B., Icely, J., & Newton, A. (2021). Electronic waste, an environmental problem exported to developing countries: The GOOD, the BAD and the UGLY. *Sustainability*, 13(9), 5302. Retrieved on 14th July, 2023 from: <https://www.mdpi.com/2071-1050/13/9/5302/pdf>
11. fortunejournals.com, 2023. *Theories and concepts of human behaviors*. Retrieved on 14th July, 2023 from: <http://www.fortunejournals.com/articles/theories-and-concepts-for-human-behavior-in-environmental-preservation.html>
12. earth.org, 2023. *Issues related to environments in India*. Retrieved on 14th July, 2023 from: <https://earth.org/environmental-issues-in-india/>
13. Bhuvaneshwari, S., Hettiarachchi, H., & Meegoda, J. N. (2019). Crop residue burning in India: policy challenges and potential solutions. *International journal of environmental research and public health*, 16(5), 832. Retrieved on 14th July, 2023 from: <https://www.mdpi.com/1660-4601/16/5/832/pdf>
14. Sharma, M., Joshi, S., Kannan, D., Govindan, K., Singh, R., & Purohit, H. C. (2020). Internet of Things (IoT) adoption barriers of smart cities' waste management: An Indian context. *Journal of Cleaner Production*, 270, 122047. Retrieved on 14th July, 2023 from: [https://findresearcher.sdu.dk/ws/files/182238225/Accepted\\_version.pdf](https://findresearcher.sdu.dk/ws/files/182238225/Accepted_version.pdf)
15. Onwezen, Marleen C. & Antonides, Gerrit & Bartels, Jos, 2013. "The Norm Activation Model: An exploration of the functions of anticipated pride and guilt in pro-environmental behaviour," *Journal of Economic Psychology, Elsevier*, vol. 39(C), pages 141-153.
16. Meng, B., Chua, B. L., Ryu, H. B., & Han, H. (2020). Volunteer tourism (VT) traveller behaviour: Merging norm activation model and theory of planned behaviour. *Journal of Sustainable Tourism*, 28(12), 1947-1969. Retrieved on 14th July, 2023 from: [https://www.tandfonline.com/doi/pdf/10.1080/09669582.2020.1778010?casa\\_token=9wU4aulJjQgAAAAA:ghqbWdvVqjjsBor7YnTeA2uJ0xigK3HtPFAs1SkqFrijTquW0x5O3fQ2n9e4qOlxo5YtTp-Vd8CLzA](https://www.tandfonline.com/doi/pdf/10.1080/09669582.2020.1778010?casa_token=9wU4aulJjQgAAAAA:ghqbWdvVqjjsBor7YnTeA2uJ0xigK3HtPFAs1SkqFrijTquW0x5O3fQ2n9e4qOlxo5YtTp-Vd8CLzA)
17. Hines JM, Hungerford HR, Tomera AN. Analysis and synthesis of research on responsible environmental behaviour: A meta-analysis. *The Journal of Environmental Education* 18 (1987): 1-8
18. Wang, Y., Liang, J., Yang, J., Ma, X., Li, X., Wu, J., ... & Feng, Y. (2019). Analysis of the environmental behaviour of farmers for non-point source pollution control and management: An integration of the theory of planned behaviour and the protection motivation theory. *Journal of environmental management*, 237, 15-23. Retrieved on 14th July, 2023 from: <http://img.data.ac.cn/geotest/M00/01/26/n-JvbF6yN5WAX3hrABWkEfvqELU655.pdf>
19. Villanthenkodath, M. A., & Mahalik, M. K. (2022). Technological innovation and environmental quality nexus in India: does inward remittance matter?. *Journal of Public Affairs*, 22(1), e2291. Retrieved on 14th July, 2023 from: [https://www.researchgate.net/profile/Muhammed-Ashiq-Villanthenkodath/publication/343046378\\_Technological\\_Innovation\\_and\\_Environmental\\_Quality\\_Nexus\\_in\\_India\\_Does\\_Inward\\_Remittance\\_Matter/links/5f4b3af392851c6cfd0076e5/Technological-Innovation-and-Environmental-Quality-Nexus-in-India-Does-](https://www.researchgate.net/profile/Muhammed-Ashiq-Villanthenkodath/publication/343046378_Technological_Innovation_and_Environmental_Quality_Nexus_in_India_Does_Inward_Remittance_Matter/links/5f4b3af392851c6cfd0076e5/Technological-Innovation-and-Environmental-Quality-Nexus-in-India-Does-)



- Inward-Remittance-Matter.pdf
20. Bhuvaneshwari, S., Hettiarachchi, H., & Meegoda, J. N. (2019). Crop residue burning in India: policy challenges and potential solutions. *International journal of environmental research and public health*, 16(5), 832. Retrieved on 14th July, 2023 from: <https://www.mdpi.com/1660-4601/16/5/832/pdf>
  21. Rajamani, L., & Peel, J. (Eds.). (2021). *The Oxford handbook of international environmental law*. Oxford University Press. Retrieved on 14th July, 2023 from: [https://www.research.ed.ac.uk/files/8186641/the\\_oxford\\_handbook.pdf](https://www.research.ed.ac.uk/files/8186641/the_oxford_handbook.pdf)
  22. Elmagrhi, M. H., Ntim, C. G., Elamer, A. A., & Zhang, Q. (2019). A study of environmental policies and regulations, governance structures, and environmental performance: The role of female directors. *Business strategy and the environment*, 28(1), 206-220. Retrieved on 14th July, 2023 from: [https://eprints.soton.ac.uk/425077/1/Accepted\\_BSE\\_Manuscript\\_9\\_October\\_2018.pdf](https://eprints.soton.ac.uk/425077/1/Accepted_BSE_Manuscript_9_October_2018.pdf)
  23. Som Tyagi(2017). Jeevan vidya shivir-A Study of Co-existential Realities- Lecture Series On mindset, thought etc. Retrieved on Dec2, 2023 from: [https://youtu.be/wDH0yj1b7e8?si=PmXruu5Aw8wl3\\_xU](https://youtu.be/wDH0yj1b7e8?si=PmXruu5Aw8wl3_xU)
  24. Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: A review of theories, concepts, and latest research. *Journal of Sustainable Tourism*, 29(7), 1021-1042. Retrieved on 14th July, 2023 from: <https://www.tandfonline.com/doi/pdf/10.1080/09669582.2021.1903019>
  25. Lazarus, R. J. (2023). *The making of environmental law*. University of Chicago Press. Retrieved on 14th July, 2023 from: <https://www.mccain.de/sites/mccain.de/files/contact/the-making-of-environmental-law-richard-j-lazarus-6ca0e28.pdf>

### Abbreviations

- DV- Dependent Variables  
 IV-IndependentVariables  
 SPSS- Statistical Package for the Social Sciences  
 RO- Research Objective  
 RQ- Research Question

### Appendices

#### Appendix 1: Survey questionnaire

1. What is your age?

30-36

37-42

43-48

49-55

2. Which gender are you?

Male

Female

Others

3. What is your academic qualification?

Matric

Higher Secondary

Graduation

Post Graduation

**Dependant variable: Challenges faced in India**

4. People are violating the rules of environment policies.

5. Industrialists are not maintain the rules for their business

6. After the application and punishment rules also, people are not showing interest to maintain rules

**Independent variable: Reasons for violations of rules**

7. The Government is interfering too much in those agencies those are trying to protect the environments policies

8. There is a huge level of corruption among ministries for violation of environmental rules

9. Industrialists are not being punished for violation of rules

**Independent variable: Corruption**

10. Strict rules and regulations and punishment should be implicated for breaking rules.

11. Higher officers should be strict and should not be involved in corruption to reduce the breaking of rules

**Independent variables: Strategies to mitigate the issues**

12. Industrialists should maintain the rules strictly related to the environment.

13. Proper education and awareness should be provided to the people with the help of workshops and programs.