

## **"Implementing Environmental Responsibility: The Legal Framework and Eco-Labeling in Green Governance in India"**

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"The environment and the economy are two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves" Wangari Maathai Abstract:

Enforcing environmental responsibility is increasingly critical in India amid rapid industrialization and urbanization. This paper examines the legal framework and eco-labeling practices within the context of green governance in India, aiming to assess their effectiveness in promoting sustainable development and environmental stewardship. The legal framework in India comprises a complex network of laws, regulations, and policies aimed at safeguarding the environment and natural resources. These laws set stringent emissions, waste disposal, and resource extraction norms, establishing a baseline for ecological responsibility. Complementing these regulatory measures, eco-labeling initiatives, with their immense potential, have gained traction as mechanisms to incentivize sustainable practices among businesses and inform consumers about environmentally friendly products. Eco-labels aim to certify products meeting specific environmental criteria. These labels promote transparency and create market incentives for companies to adopt greener practices, fostering a culture of environmental responsibility. The potential benefits of these initiatives are significant, offering a promising future for sustainable development in India.

However, challenges persist in the implementation and enforcement of these initiatives. Issues such as regulatory compliance, enforcement capacity, and the prevalence of greenwashing practices undermine the credibility and impact of eco-labeling schemes. Addressing these challenges requires enhanced collaboration between government agencies, industry stakeholders, and civil society, to strengthen monitoring, verification, and consumer awareness. Through case studies and analysis of current practices in India, this paper evaluates the strengths and weaknesses of existing legal frameworks and eco-labeling mechanisms. It seeks to provide recommendations for enhancing the efficacy of green governance in India, emphasizing the need for adaptive

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policies, robust enforcement mechanisms, and public engagement to achieve sustainable development goals and ensure environmental stewardship in a rapidly evolving economic landscape.

Keywords: Environment, Eco-Label, Green Governance

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1. Introduction:

Environment is the main contributor to the progress made by human beings from the development of civilization to the present era; it can be said that the development of human civilization and culture is the result of adaptation and harmony of the human environment. This is why many ancient civilizations got absorbed in the trough of time due to unfavorable environments, and species of many organisms and plant groups became extinct. This crisis is deepening for many. Environment is the effect on all the external conditions and living beings, which is the regulator of the development cycle of the biological world. Therefore, the environment is the visible and invisible set of physical elements, conditions, and influences that surround living beings and affect their responses and are themselves affected by them. The environment includes all those conditions, organizations, and influences that affect an organism or species' emergence, development, and death. It is clear that various elements are included in the environment, and all these elements keep reacting. As a result of this, life development takes place. Thus, humans and other animals are all the products of the environment. Not only their origin, development, and present form, but their future existence is also dependent on environmental conditions. An environment is a group of many elements, and all these elements or components, living in a state of natural balance, they create such an environment in which the development of humans, animal, plant etc. continues in a continuous sequence, but if any one element is deficient or there is a hindrance in its natural action, then its bad effect falls on other elements, due to which a new abnormal situation is born. Water, air, humans and the economic, social and cultural organizations developed by them are also affected by this inequality, many types of natural calamities are born, which becomes a cause of crisis for the existence of the living world. Environment has been an integral part of human life in Indian civilization and culture since ancient times. The Independent Commission for the Affairs of International Development expressed the opinion in 1983,

"Increasing pressure on land, increasing use of chemical elements, rapidly expanding desert, indiscriminate destruction of forests, all these together reduce the fertility of the earth. And this situation is there in many countries of the world."

World today faces Serious Environmental Problems both at National as well as Global levels. The solutions for these problems are a great welcome anytime without further delay. The success of these solutions will determine not just the future but the very existence of Human Race and the World at large. The Environmental problems pose great challenges than ever in history. Water, Air, Soil pollution, Climate Change, Deforestation, Species on verge of extinction, Biodiversity issues and so on the list continues. Environmentalists and Regulators are strongly putting their efforts to save environment but shedding a light upon what we all do and should do as Responsible Consumer Community which is huge in number will determine overall success. The rising awareness and concern about environmental issues gives solace to environmentalists and World leaders which is a step further towards Green and Clean Environment but more is need of the hour. Eco-consciousness does drive attitude but does not totally result into behavior because of personal, social and situational factors. A deep analysis of the matter will not only help Marketers, Regulators but also Consumers themselves and ultimately bring harmony and solve the paradox of Economic and Environmental conflict. The famous philosopher Friedrich Engels said years ago, "We should not be overwhelmed with self-admiration because of our human victory over nature, because it takes retribution from us for such a victory."<sup>3</sup> To protect the environment, scientists and environmentalists are giving warnings again and again. Padma Vibhushan scientist Shri M.M. Swaminathan says, "Unless there will be a revolutionary change in the people's attitude towards the environment, then all the efforts made for environmental protection are in vain. The means of modern communication, the political system, and our mass media are capable enough to bring about this revolution." Scientist Helgate had said in 1991, "The solution to these problems is not through science and technology but with politics."<sup>4</sup> According to Professor M. Casas of the Department of Science, Cairo University, Egypt, "One of the biggest problems of the 21st century will be to make the metropolis pollution-free. Because of their pollution, they are considered "human." Volcanoes or heat islands have started to be called, and in this century, ways will be

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<sup>3</sup> Acharya, Geetika, Environment Protection, Jeevan Suraksha, JS Publishing House, Delhi, 2006

<sup>4</sup> Kulshreshtha, Neelam, Green Earth's Environment (An Introduction to Environment) Current Affairs, New Delhi, 2006

found to make them pollution-free. Other problems like poverty, increasing population, hunger, and natural disasters will have to be fought in this century.<sup>5</sup> In 1980, the US President presented a report called 'World 2000', which said, "If environmental pollution is not controlled, then by 2030 there will be an orgy of acid rain, hunger, and epidemic and the future of humanity will be in danger."<sup>6</sup>

Environmental problems are not limited to the boundaries of a country. Environment is the common heritage of all the people of the earth. Environmental issues like continuous depletion of natural resources, ozone depletion, acid rain, greenhouse effect, etc., disturbed the world community in the twentieth century. In the World Environment Conference held in Stockholm in June 1972 under the aegis of the United Nations, the heads of 119 countries, including India, expressed deep concern. This conference came to the fore as the first collective effort for environmental protection; since then, World Environment Day has been celebrated every year on the 5th of June to awaken public consciousness. Economist B.L. Jain, pointing out the seriousness of population growth, had said, "Bomb blast destroys wealth and people in a small area, but an explosion of population damages the social and economic life of the whole country."<sup>7</sup> As per the United Nations Environmental Program, the two root causes of environmental problems are poverty and misuse of wealth. A large community of poor is forced to exploit natural resources for their immediate benefit, subsistence, regardless of long-term interests, while a small community of rich, to meet their needs, executes long-term nonsustainable sources on the destruction of the poor. It can be clearly said that increasing population and poverty are the main reasons for environmental problems.<sup>8</sup> Dr. N. Sadiq, the United Nations Population Fund expert, clearly believes, "The growing population is becoming the biggest threat to the environment. If this population growth continues, the world population will reach 14.5 billion by the end of the next century. In our country, no clear population policy has yet been determined to stop the population rate." Due to the ever-increasing population, all the seminars, articles, etc., done for environmental protection do not make any sense.<sup>9</sup>

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<sup>5</sup> id

<sup>6</sup> Sharma, Dr. RA, Environmental Education, Lyle Book Depot, Meerut, 1998

<sup>7</sup> Jain, Basant Lal and Singh, Vijaypal, Introduction to Economics, Bharat Prakashan Mandir, Meerut, 1992

<sup>8</sup> Singh, Kedar Nath, Forestry of the 21st Century, Paryavaran Gyan Yagya Samiti, Lucknow 2001

<sup>9</sup> Acharya, Geetika, Environment Defense, Jeevan Suraksha, JS Publishing House, Delhi, 2006

It is a well-known fact that the root of many environmental problems of the present time, mainly global warming, industrial pollution, etc. is due to the high consumption level of the people of the developed countries. It is estimated that 20 percent of the world's population consumes about 80 percent of world resources. Thus, they have already made maximum use of the ecological capital of this planet. Radioactivity and air pollution generated by chemical bombs, rockets, atom bombs, etc., which are used from time to time in the world, have left no stone unturned in polluting the environment. According to Mr. Arthur S. Westing, the US Department of Defense, "Human wars cause severe damage to the environment; it is the natural habit of human beings that dozens of wars keep going on somewhere in the world. The result is the destruction of environmental elements and moral values. The battle site is assisted by the government of that country and the Red Cross Society, and scientists study the damage and rectify the situation."<sup>10</sup>The whole world is currently facing an environmental crisis. The development process of developed countries is not cooperative with the way of life. Rapidly growing population, poverty in developing India, and competition for new consumption among the upper and middle classes have led to improper exploitation of natural resources and increasing pressure on the environment and natural resources. In the blind race of development, man ruthlessly consumed natural resources and disturbed the entire environmental balance.

The maximum and indiscriminate use of natural resources like land, water, air, etc., in the struggle for a good life and a high standard of living is the result of the increasing use of modern science and technology in daily life. In this historical era of human development, urban development and industrialization through science, technology, and new economic policies created problems of water, air, land, noise, and radioactivity pollution.

In India, green production and consumption are still in the developing stage. Environmental deterioration and the global consumption rate are rising alarmingly. Consequently, an accumulation of waste poses serious threats to humans and the planet. The study analyses the consumers' preference for purchasing eco-labeled products based on different levels and factors and tests the influence of those factors.

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<sup>10</sup> Kulshreshtha, Neelam, Green Earth's Environment (An Introduction to Environment), Current Affairs, New Delhi, 2006

## 1.1 Eco-Label:

Eco-labels are a marketing technique that differentiates products based on greenness. Eco-labels differentiate whether the products are environmentally friendly or not. Since 1991, more than 1000 Eco label licenses have been issued till Jan 2010 as per European Commission Environment, 2011. In 1996, the Swedish Society for Nature Conservation introduced Ecolabelling on electricity with a label called 'Bra Miljöval,' translated in English as 'Good Environmental Choice.' Many European countries like Sweden introduced Ecolabelling for their products in 1988, and presently, 12 different products are covered under this scheme as per Ecolabelling Green Consumerism, 2011. Another country, Germany, has also started the "Blue Angel" label, which was applied to those products that produce minimum noise pollution, thus lessening the harmful effect on the ozone layer and the impact of mercury pollution on the environment. Canada has initiated an Ecolabel for recycled motor oil, water-based paints, and products made from recycled plastics and recycled office papers.<sup>11</sup>

## 1.2 Eco-labelling Strategy in Asian Countries:

The eco-labeling strategy globally happened in six regions: European Nations, North America, South America, Australasia, Asia, and Africa (GPNI, 2012). The eco-labeling strategy evolution in Asia is listed below: In 1989, Japan introduced the first eco-labeling 'eco mark' scheme, and it had 8 significant labels that covered different product categories. In earlier times, ISO 14020based principles and policies were followed in the region where they went for any eco-labeling strategies. In India, the Bureau of Indian Standards (BIS) issued the 'eco mark' in 1991, which covers the product's environmental and quality performance. The scheme covers a wide range of possible environmental impacts of products like degradable, recyclable, sourced material, and packaging, to name a few. However, product-specific criteria are unimportant when checking product life cycle analysis (LCA ). LCA is based on the complete study of a product, from cradle to grave or from raw material extraction and production processes to a consumer's use and disposal of the product. The symbol of the 'earthen pot' has been accepted as the logo of the Indian eco-label. 17

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<sup>11</sup> Bostrom, M; & Klintman, K., Eco standards, product labelling and green consumerism. Palgrave Macmillan Publishers Ltd, United Kingdom, 145-151,(2011)

product categories and around 130 sub-products come under this scheme. It includes soap and detergents, electric and electronic goods, food items, cosmetics, coir products, etc.

In 1992, the Korean Ministry of Environment (MOEK) implemented an eco-labeling system and adopted Type 1 eco-label (KoEco) to identify products of prominent quality and performance.<sup>12</sup>

The China Environmental Labelling Programme was introduced in 1993. This program focuses on energy efficiency, security, optimum resource utilization, and better environmental practices throughout a product's life cycle.<sup>13</sup>

Thai Green Label was established in 1994. It emphasizes environmental assessment of products' life cycles, efficient use of raw materials, and practices that help reduce environmental impact.

In 1989, the Japan Bio Plastics Association (JBPA) was established, formerly known as the Biodegradable Plastics Society (BPS). In Japan, the Ministry of Economy, Trade and Industry (METI) Energy Saving Labelling Programme 2000 and Eco Leaf label provide product environmental information based on LCA. The Ministry of Land, Infrastructure and Transport and Tourism (M/LIT) established the 'Comprehensive Assessment System for Built Environment Efficiency' (CASBEE) in 2001 to promote eco-friendly buildings. In 2005, EcoRail Mark was launched to identify the transportation of products with low environmental effects.

In 2000, the Ministry of Agriculture, Forestry and Fisheries established the Japanese Agricultural Organic Standard (JAS) for organic plants and organic processed foods of plant origin. The JAS was further developed with additional standards 2005 to care for livestock products and organically processed foods.<sup>13</sup>

The environmental labeling programs that emerged in the Asian region followed a holistic approach, which considered the social and economic perspectives through improving the environmental performance of products and processes.<sup>14</sup>

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<sup>12</sup> Jain, Basant Lal and Singh, Vijaypal, Introduction to Economics, Bharat Prakashan Mandir, Meerut, 1992

<sup>13</sup> Singh, Kedar Nath, Forestry of the 21st Century, Paryavaran Gyan Yagya Samiti, Lucknow 2001

<sup>13</sup> PolitiFact , <https://www.politifact.com/factchecks/2018/dec/18>.

<sup>14</sup> Kulshreshtha, Neelam, Green Earth's Environment (An Introduction to Environment), Current Affairs, New Delhi, 2006



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## 2. Research Objective:

1. To examine the existing global legal frameworks and guidelines governing eco-labeling practices.
2. To evaluate the effectiveness of these legal frameworks in achieving their intended environmental protection goals.
3. To identify the key limitations and challenges eco-labeling initiatives face regarding legal compliance and enforcement.

## 3. Research Methodology:

The research is based on a doctrinal research method. Researchers have used secondary data. Articles from reputed journals are part of the research work. International Instruments are considered while researching the subject. Information is retrieved from various sources. There is so much irrelevant information and data received during research work. It is removed by applying appropriate research techniques.

Research depends on the legal and international framework of the topic. Secondary sources, including acts, policies, conventions, research articles, books, journals, laws, judicial trends, and other publications, are considered for research. The research is based on various data available on the topic. Information and data are analyzed systematically. A researcher has included the opinions

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<sup>15</sup> Stamp, D.A., Glossary of Geographical Terms, p. 186, 1979

of multiple authors and given proper acknowledgment to them. Research is based on just, fair, and reasonable study and analysis of available information on the research topic.

#### 4.Statement of the problem:

The environment is closely related to people; it's far impossible for man to guard his dignity in a polluted environment. A person residing in polluted surroundings does not even consider his physical and mental health and happiness. Due to adjustments in the environment's physical, chemical, and organic situations, it becomes tough for humans to live to tell the tale. The polluted environment torments the proper lifestyles supplied beneath Article 6(1) of the Convention on Civil and Political Rights. The right to life includes food, fresh air, clean water, and pollution-free surroundings.

Thus, when we look at the legal system and its effective implementation by the Indian government attached to the environment, many shortcomings are seen like the weak position of the existing methods to prevent environmental pollution, the power of the penal provisions, and the implementation of the methods proved to be quite corrupt and negative. Some major sources of environmental pollution are high population growth, deforestation, industrial development, and lack of unplanned waste management.

In India, green production and consumption are still in the developing stage. Environmental deterioration and the global consumption rate are rising alarmingly. Consequently, an accumulation of waste poses serious threats to humans and the planet. The study analyses the consumers' preference for purchasing eco-labeled products based on different levels and factors and tests the influence of those factors.

#### 4.1 The need and motivation for the current research can be summarized in the following points:

1. Currently, India is highly vulnerable to environmental degradation due to unhealthy practices followed in the industries and by the end consumers.
2. Academic researchers have not paid enough attention to the direction of environmental sustainability in India.

3. Eco-labeling is still a new field of research, and various concepts are scrutinized through retesting and cross-cultural testing.

4. Gradual research and development in Eco-Labeling can change the concept of marketing and consumer awareness as we know it today.

Although studies have been conducted in different contexts, especially in developed countries with varying predictors of green purchase intention, these were not examined much in the Indian context. Based on the assertion that variations exist in cultural, socio-demographic, and geographical settings, the complexity of consumer behavior, and differences based on market forces that can significantly impact demand and purchase behavior toward environmentally friendly products, the need to have these variables tested in India becomes fundamental or inevitable.

The recent past is evidenced by the turmoil shift in the customer buying behavior. Consumers are much more conscious about eco-label awareness. Various studies disclosed the different attributes of the eco-labeled products, such as ozone-friendly, organic, pesticide-free, degradable, and recyclable. Though there are numerous studies on the characteristics of eco-labeled products, it is still necessary to understand the role of eco-label awareness over green and health consciousness. Further, it is also required to assess the impact of certain green and health consciousnesses to determine green purchase intentions.

Therefore, for the above reasons, green marketing has become a broad area of research.

## 5. Eco-labels:

Eco-labeling is a voluntary certification system that allows businesses to label their products or services as environmentally friendly. It serves as a marketing tool that helps consumers make informed choices by considering the environmental impact of their purchases. Eco-labels can cover various environmental criteria, such as energy efficiency, carbon footprint, recycling capabilities, and sustainable sourcing.

### 5.1 Types of Eco-Label:

ISO standardizes the practices, principles, and key characteristics of the three major voluntary eco-labeling programs. These are the following:

1. Type 1 Eco-labels (ISO 14024): This criterion is designed by a third party, i.e., the voluntary associations that identify the products that are less harmful to the environment than products in the same category. The selection of product categories and the setting of standards for awarding the label are undertaken by a board of committees based on different types of consultative processes involving the interest of different groups like industry, consumer, environmental groups, nonenvironmental groups, and environmental risk assessment experts (ISO, 2015). This process charges a fee for using eco-labels for a fixed period, administration costs and other expenses. The determined environmental criteria are usually revised every three to five years to accommodate environmental knowledge and information changes.<sup>16</sup>

Type 1 labeling programs are transparent, providing information on selected product categories, product function characteristics, selecting and developing product environmental criteria, certification and award procedures, review period, funding sources for program development, and so on.

2. Type II Eco-labels (ISO 14021): These types of eco-labels are based on manufacturers' own claims that their products have some environmental attributes. There is no predetermined standard for defining type II labels from an environmental perspective. This label needs to meet trustworthiness in advertising and claims on products. Self-declared claims are often made on products or their packaging, and they are not restricted to on-pack claims and include all environmental claims communicated through advertising, websites, or reports. These claims are meant for products and services like banking, tourism, health, etc. The key elements of ISO 14021 include the rules regarding using symbols with the text message, verification, and evaluation of claims like recyclable or biodegradable.

3. Type III Eco-labels (ISO 14025): They only provide environmental information without the predetermined criteria for weighing the environmental information. For example, type III labels mention the required quantity of energy input to produce the product without mentioning the intensity of the energy. These labels are important in business-to-business commerce, and the application of these labels is limited in the consumer market (ISO, 2012).

Type III environmental declarations are based on the ISO 14040 series of standards. The information obtained from type III labels enables objective comparisons between products

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<sup>16</sup> Environment is the same total of all external conditions and the influences on the development cycle of biotic elements over the earth's surface.

fulfilling the same standards. It is available for stakeholder review processes and published in the public domain by country-based registrars. The primary application of type III labels is to assist purchasers in green procurement, where they can make informed comparisons between products.<sup>17</sup>

#### 6. Scope and Limitations of Research:

The study is confined to eco-labeled products with attributes such as ozone-friendly, organic, pesticide-free, degradable, and recyclable only. Further, the study considered eco-label awareness as the moderating factor in determining green purchase intentions.

- 1) **Lack of Standardization:** The absence of standardized criteria and definitions for eco-labeling can confuse consumers. Clear and consistent guidelines are needed to ensure the credibility and reliability of eco-labels. Limited harmonization at the international level further complicates the issue.
- 2) **Enforcement Challenges:** Monitoring and enforcing compliance with eco-labeling criteria can be difficult, especially in voluntary cases. The lack of resources and capacity in regulatory agencies to verify and enforce eco-labeling claims poses a challenge.
- 3) **Greenwashing:** Some businesses may engage in greenwashing, which involves misleading consumers through false or exaggerated eco-labeling claims. Strong legal measures are necessary to combat this deceptive practice and protect consumers.
- 4) **Jurisdictional Variations:** Different legal frameworks and regulations across jurisdictions can create barriers to implementing eco-labeling effectively. Harmonization efforts are necessary to ensure consistency and facilitate global adoption.

#### 7. Legal Limitations of Eco-Labeling:

- 1) **Lack of Standardization:** The absence of standardized criteria and definitions for eco-labeling can confuse consumers. Clear and consistent guidelines are needed to ensure the credibility and reliability of eco-labels. Limited harmonization at the international level further complicates the issue.

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<sup>17</sup> Bowen, F., *After green washing- symbolic corporate environmentalism and society*. Cambridge University Press, 39-75, 2014

- 2) **Enforcement Challenges:** Monitoring and enforcing compliance with eco-labeling criteria can be difficult, especially in voluntary cases. The lack of resources and capacity in regulatory agencies to verify and enforce eco-labeling claims poses a challenge.
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- 4) **Jurisdictional Variations:** Different legal frameworks and regulations across jurisdictions can create barriers to implementing eco-labeling effectively. Harmonization efforts are necessary to ensure consistency and facilitate global adoption.

## 8. Conclusion:

This research paper examines eco-labeling's legal prospects and limitations to contribute to the ongoing discourse on this environmental protection tool. The findings will provide valuable insights for policymakers, regulators, and stakeholders involved in developing and implementing eco-labeling standards, ultimately contributing to the broader goal of sustainable development and environmental conservation.

The need and motivation for the current research can be summarized in the following points:

1. Currently, India is highly vulnerable to environmental degradation due to unhealthy practices followed in the industries and by the end consumers.
2. Academic researchers have paid little attention to the direction of environmental sustainability in India.
3. Eco-labeling is still a new field of research, and various concepts of it are still being scrutinized through retesting and cross-cultural testing.
4. Gradual research and development in the field of Eco-Labeling have the power to change the concept of marketing and consumer awareness as we know it today.

Although studies have been conducted in different contexts, especially in developed countries with different predictors of green purchase intention, these were not examined much in the Indian context. Based on the assertion that variations exist in cultural, socio-demographic, and

geographical settings and complexity of consumer behavior, and also differences based on market forces which can significantly impact demand and purchase behavior towards environmentally friendly products (Elhan & Nabsiah, 2011; Ottman, 1992; Peattie, 1992), the need to have these variables tested in India becomes fundamental or inevitable.<sup>18</sup>

The recent past is evidenced by the turmoil shift in customer buying behavior. Consumers are much more conscious about eco-label awareness. Various studies disclosed the different attributes of eco-labeled products, such as being ozone-friendly, organic, pesticide-free, degradable, and recyclable. Though there are numerous studies on the attributes of eco-labeled products, it is still necessary to understand the role of eco-label awareness over green and health consciousness. Further, it is also required to assess the impact of certain green and health consciousnesses to determine green purchase intentions. Therefore, for the above reasons, green marketing has become a broad area of current research. While eco-labeling holds promise as an environmental protection tool, its implementation faces legal and practical limitations. Addressing these challenges through standardized criteria, enhanced enforcement measures, harmonization of regulations, and consumer education can maximize the effectiveness of ecolabeling and promote environmental sustainability. Assuming that sustainable development is a restructuring program aimed at fostering social, technical, and economic links based on respect for the environment, this concept forces existing organizations to renew themselves. It creates new opportunities to act in ways that ensure the current generation's commitment to future generations by promoting a greener society and economy is fulfilled once more.

However, sustainable development will not be achieved without transforming .....

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