

# **Ethical Sustainable Development for The Betterment of Humanity: Management Ethics' Perspective**

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#### ABSTRACT

To attain sustainable development for the betterment of humanity there is need for the balancing of its three dimensions: Economic growth, social progress and Environmental stewardship. Though Legislations relating to each of the three dimensions have been enacted by governments of various countries of the world, there is growing evidence that they have failed. The various scandals, undesirable business activities such as pollution of water bodies through disposal of industrial waste, exploitation of workers, giving bribes to government officials, fraud against consumers and egoistic decisions of some organization's top management are some examples of managers omissions and commissions which needlessly stresses the outrageous ways that they use in their quest to maximize their company profits. An Equally important contributor to unsustainable development is omissions and/or commissions, refusal to listen to wise counsel of science and experts on the part of political leadership who manages state affairs. This calls for a paradigm shift to ethical approach. The ethical reasoning promises to be a panacea where legislations have so far failed. The purpose of this work is to discuss the concept of sustainable development viewed through the lens of management ethics, the role of management ethics in shaping the quality of decisions made by managers in furtherance of organizational or state goals which have a bearing on the triple bottom line, ethical dilemmas in management and attempts to suggest ethical framework and strategies for use by managers in making decisions that will bring about sustainable development.

Key words: Ethics, Sustainability, Green management, Utilitarianism ,Deontology, Teleology

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#### Introduction

If people in the rest of the world lived European lifestyles it would take the resources of two and a half planets (Earth) to support them (European Commission (EC), 2009). This quotation paints a bleak picture of how wasteful humanity is in exploiting and using the limited natural resources on earth to satisfy their needs. The simple fact is that by using our natural and energy resources inefficiently, we are producing more waste than we can recycle as a useful resource, and are contributing to climate change (ibid)

# **Sustainable Development Defined**

The definitions of the term sustainable development are as varied as those who define them. Examination of a few of them follows.

The most cited definition of sustainable development is that used in the Brundtland report. It defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development (WCED), 1987). This definition is need-centred. When it was first coined, it focused on environmental dimension of development but it has since evolved and now incorporates other areas previously neglected by development, such as socioeconomic domain, education or culture, the latter being recognized as a full-fledged source of development by the Universal Declaration of Cultural Diversity adopted by UNESCO in 2001 (UNESCO, 2005)

According to the British Department of Trade and Industry (2003) Sustainable development is a tool for achieving a better quality of life for everyone, now and for the future generations, through social progress, maintenance of high and stable levels of economic growth and employment, protecting, and if possible enhancing the environment and the prudent use of natural resources and general consumptions.

Sustainable development is really about establishing a balance between Profit, Planet and People (Dashwal 2015). Sustainable development is grounded on three pillars: economic development, social development and safeguarding the environment (UNESCO, 2005). In 2015, 193 countries met at the UN headquarters in New York and agreed on Seventeen (17) sustainable development goals which balance and integrate the three dimensions of sustainable development. These sustainable development goals (SDGs) are: No poverty, zero hunger, good health and well being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent



work and economic growth, industry, innovation and infrastructure, reduced inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace, justice and strong institutions and partnership for the goals (UNDP, 2015).

Efforts by organizations and national governments to achieve a balance between the three pillars of sustainable development have proved a mirage. Efforts to achieve these sustainable development though Legislations have failed (Eid, 2014), therefore, there is need for a paradigm shift towards ethical approach.

Undoubtedly the ethical approach is about altruism, honesty, sincerity, respect for life, man and nature, tolerance, solidarity, social justice and many others, all of them belonging to the moral "good" (Buşoi, 2014). The aforementioned reality agrees with the fact that businesses do not have just one single goal – namely adding economic value – but that it has an extended goal set, including certain social and environmental responsibilities (Crăciun, 2014).

# **Research Questions**

The purpose of this paper is to get answers to the following three questions

- i. What is the cause of the world's inability to sustain its development trends?
- ii. What is the contribution of management ethics to sustainable development?
- iii. What are the ethical strategies for promoting sustainable development?

To answer the above questions, vast array of secondary sources of information were consulted. Secondary sources such as various United Nation (UN) reports, World Bank (WB) reports, European commission (EC) reports, organization for economic, cooperation and development (OECD) reports, United nations educational, scientific and cultural organizations (UNESCO) report, textbooks, journal articles and various internet websites were examined in order to gain an in depth understanding of the chosen paper topic. Efforts were made to utilize the most recent versions of these reports and papers in order to make this paper as relevant and up to date as possible. The research questions asked in the introductory pages of this paper were answered by critically evaluating and synthesizing the information obtained from these sources.

# **Causes of Unsustainable Development**

For a long time, economic growth had been thought to be linearly related to economic development such that expansion of the economy was believed to result in improvement of people's well being. However, the reality is that there are many countries with impressive economic growth but has insignificant effect on the life of its citizens. The reasons are not difficult to find. Whether economic growth will result in sustainable development will depend on: (1) how the growth in the economy is distributed among the citizens of the country concerned and (2) the extent to which the attendant externalities such as environmental degradation, pollution, depletion of the ozone layer and other consequential natural calamities accompanying the expansion of the economy are handled.

In the words of Eid (2014) the interpretations of quality of life have also varied along the years to match the different World developments and aspirations; the better quality of life is no longer limited to a better economic standard of living but now intrinsically linked to ecological and social sustainability.

The world has failed to achieve sustainable development because of capitalism driven by insatiable quest for profits by organizations which has resulted in rampant inequality, massive unemployment, and environmental destruction (Yunus 2015). The result has been a world, which if unchecked, everybody will eventually lose.

The world has witnessed huge scandals, undesirable business activities such as pollution of water bodies through disposal of industrial waste, exploitation of workers, fraud against consumers and egoistic decisions of some organization's top management all in the name of pursuit of self-interest. Although Economic and Business benefits are linked to a better quality of life socially and environmentally, where the laws have failed to deliver, ethical reasoning emerges as a powerful tool forward (Eid, 2014).

#### **Ethical Management Approach to Sustainable Development**

For sustainable development to be achieved, actions of managers must be ethical. Management ethics play a critical role in bringing about sustainable development. The concept of Management ethics refers to the standards of behavior that govern managers (acting as an individual or as a group) in their work. Managers not only have a duty to protect the interest of the organization, but also the people working there (Employees) and the environment. Organizations are nowadays realizing that, in addition to focusing on financial profits, they must consider all social and environmental impacts for their long term sustainability (Deshwal 2015). The ethical approach focuses on the morality of actions of businesses (Deontology) and consequences of their actions (Teleology or consequentialism). In carrying out their work, managers often face a lot of dilemmas.



# **Ethical Dilemmas in Management**

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Often managers, in the course of their work find themselves in ethical dilemmas not knowing which of the two conflicting decisions to make. Ethical dilemma occurs when there is a conflict between two rights or two courses of action. What is ethically right and good is what can help people to lead a free, healthy and fulfilling life (Mihailović, Cvijanović & Simonović, (2015)

Two examples of ethical dilemmas are given below

#### a. Roșia Montana Mining Project

Rosia Montana Gold Corporation (RMGC) was to mine Gold and silver in Romania using cyanide based technologies. This raised controversy as it would have caused massive environmental degradation including pollution, destruction of historical sites/ monuments, relocation of cemeteries and loss of tourism potential.

The proponents of the mining project who included RMGC argued that the method of mining used didn't present a real and irreversible danger to the environment and that they will do the greening of the affected area after finishing the mining. Residents of the area argued that jobs would be created ,a solution to the present unemployment at Roşia Montana region, people would be trained in different fields and the standard of living would be improved. In addition, the Romanian government would have earned 2% of the profit, which was estimated at 4.4 million USD per annum for an estimated period of 17-20 years.

### **Ethical questions**

- Was it necessary to start mining because people needed jobs in order to live a decent life?
- ii. Should the mining have been stopped at all costs because the mining would have transformed the area into an enormous, sad, black and irremediable poisoned hole?
- iii. Was the project justified because it brought benefits to Romanian government?

The decision was made eventually to stop the project. This is an actual economic situation with possible major implications regarding sustainable development.

Excerpt from Busoi (2014).

This and other polemic issues that would have arisen from the project can only be resolved by invoking ethical standards or principles

#### b. Standard gauge Railways Project In Kenya

In Kenya, the construction of Standard gauge Railway (SGR) through Nairobi National Park is another example of a controversial project. On its way to western region, the SGR passes through Nairobi National Park. Since the decision to route the project through the park was made, those for and against the project passing through the park fought many battles inside and outside the court with those against the SGR passing through the park (community leaders and nature enthusiasts from the Kenya Coalition for Wildlife Conservation, Friends of Nairobi National Park and Management) arguing that the railway can be easily rerouted to pass through other areas outside the park to avoid disruption to flora and fauna in the park. Further, they argued that no adequate environmental impact assessment was done. It is also important to note that Wildlife movements have been affected and migrations no longer take place as they did two decades ago (Rajab, 2018).

The arguments advanced by those in support for the SGR passing through the park were that the cost of re-rerouting the railway was going to be high, the line will be fitted with an acoustic noise barrier whose specifications will be approved by the Kenya Wildlife service (KWS) and at the end of the super bridge construction, the contractor will embark on an appropriate vegetation restoration and soil reinstatement for the affected areas (ibid).

Although those for the project passing through the park finally carried the day, eventually in the long run, who was right will be known when cost benefit analysis of routing SGR through the park is done.

As in the case of Rosia Montana, the polemic issues surrounding the standard gauge railway project in Kenya would have been resolved by invoking ethical standards or principles.

# A Framework for Overcoming Ethical Dilemmas

A difficult problem in discussing ethical influences is the lack of a single universal standard for judging whether a particular action is ethical. In Certo and Peters (1988) Laczniak summarizes five ethical standards that have been proposed to guide in decision making when faced with an ethical issue to resolve. They are

The golden rule: Act in the way you would expect others to act towards you



- b. The utilitarian principle/theory: utilitarianism asserts that one should act in a way that results in the greatest good for the greatest number of people.
- c. Kant's categorical imperative: Act in such a way that the action you take could be universal law or rule of behaviour under the circumstances
- d. *The professional ethic*: Take actions that a disinterested panel of professional colleagues would view as proper.
- e. The TV test: Ask, "Would I feel comfortable explaining to the public over TV why I took the action?"

#### **Basic Approaches to Ethical decision-Making**

When making decisions affecting organizations or society, managers should be guided by the following principles:

#### a. The utilitarian approach

Utilitarianism asserts that one should act in a way that results in the greatest good for the greatest number of people. The ethical action chosen should bring the greatest benefit and the least harm to the organization, people or society.

# b. Moral Rights Approach

The moral rights approach asserts that human beings have fundamental rights and liberties that cannot be taken away by an individual's decision. Thus, an ethically correct decision is one that best maintains the rights of those people affected by it whether in the organization or in the society.

Six moral rights should be considered during decision making:

- 1. The right to life and safety. Individuals have a right to live without endangerment or violation of their health and safety
- 2. The right to privacy. Individuals can choose to do as they please away from work and have control of information about their private life. Eavesdropping on employees violates this right.
- 3. The right of freedom of conscience. Individuals may refrain from carrying out any order that violates their moral or religious norms (conscience).
- 4. *The right of free speech*. Individuals may criticize truthfully the ethics or legality of actions of others. This right would support whistle-blowers who call attention to illegal or inappropriate actions within a company
- 5. The right to due process. Individuals have a right to an impartial hearing and fair treatment.
- 6. *The right of free consent*. Individuals are to be treated only as they knowingly and freely consent to be treated To make ethical decisions, managers need to avoid interfering with the fundamental rights of others.

# c. Justice Approach

The justice approach holds that moral decisions must be based on standards of equity, fairness, and impartiality. Three types of justice are of concern to managers: distributive justice, procedural justice, and compensatory justice. Distributive justice requires that different treatment of people should not be based on arbitrary characteristics. Individuals who are similar in all respects relevant to a decision should be treated similarly. Thus, men and women should not receive different salaries if they are performing the same job. However, people who differ in a substantive way, such as job skills or responsibilities, can be treated differently in proportion to the differences in skills or responsibility among them. This difference should have a clear relationship to organizational goals and tasks

Procedural justice requires that rules be administered fairly. Rules should be clearly stated and be consistently and impartially enforced. Compensatory justice argues that individuals should be compensated for the cost of injuries they sustain in the course of their work as a result of action of managers. Moreover, individuals should not be held responsible for matters over which they have no control.

# d. The Common Good Approach

Common good are certain general conditions that are equally available to everyone's advantage. This approach focuses on ensuring that the social policies, social systems, institutions and environment on which we depend are beneficial to all. Unpolluted environment is an example of common good shared by all. Organizations polluting the environment in pursuit of their singular interest of maximizing profit is violating the principle of common good



because pollution affects the larger society thus the common good approach requires individuals to surbodinate their own individual good to that of the wider society

# e. Virtue Approach

This principle is premised on the fact that individuals (both natural and legal persons) have certain ideals towards which they should strive. Examples of these virtues are Honesty, courage, compassion, generosity, fidelity, integrity, fairness, self control and prudence. These are character traits that enable us to be and act in ways that develop our highest potential. They enable us pursue the ideals we have adopted.

# Strategies to Achieve Sustainable Development

To achieve sustainable development that meets the triple bottom line threshold where pursuit of profit is tempered with concern for planet and social progress, the following strategies are recommended:

#### i. Social business approach

The social business approach fronted by Professor Yunus, a Bangladeshi economist and founder of Grameen Bank, advocates for a world of thee zeros that is zero poverty, zero unemployment and zero carbon emission (Anam, 2015). This is a sharp departure from the capitalist view that is based on avarice, greed, acquisitive instinct, self interest, etc that put to question the sustainability of the present civilization.

The present civilization is unsustainable because it operates, produces, consumes, allocates resources, makes laws, dispenses justice, discriminates between the rich and the poor, allows poverty and unemployment to exist, and, most crucially, as it now recklessly and unthinkingly exploits nature (ibid).

According to Yunus (2015) Capitalist engine is broken and in its current form it inevitably leads to rampant inequality, massive unemployment, and environmental destruction

The advent of the social business approach has seen many businesses and enterprises being created in many countries of the world that are committed to reducing poverty, improving health care and education, cleaning up pollution, and serving other urgent human needs in ingenious, innovative ways (ibid)

# ii. Green management

Green management is the process of carrying out management activities such as production, Human resource management, marketing, procurement, accounting, finance management etc in a way that balances the triple bottom line. It is when a company minimises processes that harm the environment (Whiting, 2018). Some of the green management activities include:

# a. Green production

According to the EC, (2009) The products we buy and use every day have a significant impact on the environment, from the materials used in their production, to the energy needed to use them and the waste they create once obsolete, therefore, there is need to produce and use products that use minimum resources to produce and has minimum environmental impact.

Phasing out products that use excessive energy or water resources or that contain hazardous materials is an important first step (ibid)

# b. Green HRM

Green HRM is the use of HRM policies to support the sustainable use of resources within organizations to contribute to environment sustainability (Deshwal 2015). He suggested that Green HRM can contribute to sustainable development through the following ways:

- i. Green Sourcing and Acquisition of Human Resources- This involves using environmental consciousness/awareness as key selection criteria of the right candidates. It should be done through the internet
- **ii.** Induction training Course content should include environment issues in addition to the usual organizational issues
- iii. Performance management and appraisals should be based on green targets as opposed to mere outputs



- iv. Training and development- Should make use of technology to save on paper, travelling etc
- v. Employee Relations Encourage the employees to be involved and participate in the social and ecological initiatives.
- vi. Grounds for employee discipline and separation- Employee behaviour which are environmentally unfriendly should be taken to constitute breach of contract and possible ground for dismissal.
- vii. Telecommuting and Teleconferencing- this should be encouraged to minimize employee travel and use of vehicles
- viii. Use of intranet emphasizing use of Intranet minimizes the use of paper hence environmental conservation

# c. Green procurement

For procurement to be environmentally friendly, it should be done through the internet to minimize use of paper and travels by procurement officers

### d. Promotion of Sustainable consumption and production

This can be achieved by adopting the '3R' strategy where the '3R' stands for 'Reduce- Recycle and Reuse' resources. Reduce the use of paper for example use of green channel of communication e.g. internet, telephone, Recycle paper use and Re-use Containers (Deshwal 2015)

According to OECD (2008) some of the policy tools and instruments adopted by various governments to promote sustainable consumption and production include:

#### • Use of Standards and Mandatory Labels

Standards are used to guarantee the quality of products or services and product or services that do not meet set standards are banned from the market e.g. use of poly-ethene bags in Kenya was banned in 2017.

• Taxes and Charges are imposed to discourage the consumption of products which are harmful to consumers and environment

# • Subsidies and Incentives

Encourages production and consumption of socially and environmentally friendly goods and services.

# • Communications Campaigns

For or against production and consumption of products that have negative consequences.

#### • Consumer education

Education of consumers on social and environmental effects of the goods they consume. Involves incorporating consumer education in school curriculum e.g. Health awareness, environmental health etc.

# • Advertising

Commercial advertising is a powerful force for promoting sustainable consumption in highlighting the sustainability dimensions of goods and services and convincing consumers to purchase these products, sometimes irregardless of price

# e. Ethical Science and innovation

Although Scientific innovation and technology present major ethical dilemmas, as in transgenic research or human cloning they are important aspects of sustainable development, insofar as they bring progress on numerous fronts, such as environmental preservation, agriculture or health (UNESCO 2005)

Proffesor Yunus contents that the world is changing at an unbelievable rate due technological innovation but unfortunately this technology is in the hands of the rich who are using it to further enrich themselves (Anam, 2015).



If the same technology is used to solve the problems of the world -- poverty, unemployment, environmental degradation, population management, etc., then the world will become transformed and the immediate task should be to use the magnificent innovations of science and technology to trigger "sustainable growth" and not to increase rich-poor gap and all sorts of discrimination (ibid)

# f. Corporate social responsibility

This is ethics at organizational level since it refers to the obligation that an organization has to make choices and to take actions that will contribute to the good of society as well as the good of the organization. It involves a voluntary response from an organization that is above and beyond what is specified by law (Richardson, 2008; Ganescu, 2012)

#### g. Ethical leadership

Freeman, Pierce & Dodd (2000) argued in their article that it is possible for business leaders to make money, do the right thing and participate in saving the earth. Their comments underscored the important role leadership of any shade plays in ensuring ethical sustainable development. Leaders can have the entities they lead achieve their objectives while at the same time preserving the environment and ensuring social progress of the society in which they operate.

Ethical leaders should avoid mindsets which make them think that it is impossible to integrate business, ethics and the environment into new modes of thinking. Five mindsets which act as barriers to green conversation i.e mindsets that prevent environmental progress include: Regulatory, cost-benefit, constraint, sustainable development and the greenwashing mind-sets (*ibid*). Regulatory mindset says that the best way to take care of the environment is through the public policy process that produces law and rules with which the business must comply while cost-benefit mindless says that cleaning up the environment or making products and services more environmentally friendly has costs and benefits. Constraint mindset says that the main purpose of business is to create and sustain economic value and everything else from ethics to the environment to meaningful work is best viewed as a side constaint. Sustainable development mindset according to the Brundtland report called on the governments to play and intrusive role in the peocess of value creation however planned economies have been known to be undemocratic, heavy handed and anti social while the greenwashing mind-set says that businesses could never act on values other than profit maximization and any company engaging in something that seems good for the environment is but a greenwash, to disguise their real intention. However a company should truly create and sustain value in a way that sustains and cares for the earth.

# h. Citizens' education - Imparting Moral values

According to UNESCO (2005) Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues. Human capital, knowledge, people's capabilities and abilities, obtained by investing in lifelong education, are the creative power which offers both its possessors and the organizations that employ them and the society they live in financial and nonfinancial benefits, generating development and what is called progress (*BUŞOI*, 2014)

Quality education at all levels constitutes a vital tool to tackle the major problems linked to sustainable development, such as poverty, HIV/AIDS, environmental deterioration, non-sustainable patterns of production and consumption, demographic growth, rural and urban transformations, poor health, unethical practices, lack of knowledge creation and sharing, gender inequality, social injustice, bad governance and cultural diversity (UNESCO, 2005).

For education to contribute to sustainable development, it should possess the following characteristics (ibid):

- Allows learners to acquire the skills, capacities, values and knowledge required to ensure sustainable development;
- Universal access- dispensed at all levels and in all social contexts (family, school, workplace, community)
- Fosters responsible citizens and promotes democracy by allowing individuals and communities to enjoy their rights and fulfil their responsibilities;
- Fosters the individual's balanced development.

# **CONCLUSION**

Achieving sustainable development requires a multi-pronged approach (ethical leadership, ethical science and innovation, ethical education, ethical production and consumerism, ethical business/social business etc) if the needs of the present generation are to be met without compromising the ability of future generations to meet their own needs.

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To achieve balance in the triple bottom line of economic, environmental and social levels of sustainability, the ethical reasoning proved to promote social inclusion, public participation, protection & enhancement of the environment and stable economic growth with clear and fair distribution of wealth and levels of consumptions (Eid, 2014).

Finally, to achieve sustainable development for the betterment of humanity, managers are under moral obligation to make decisions that not only contribute to achievement of organizational goal (profit) and social progress but also respect the environment in which the organization is operating.

#### **REFFERENCES**

- Anam, M., (2015) Commentary from Poverty Alleviation to Making a New World, Retrieved from bangladeshichronicle.net/2015/05/Commentary-From-Poverty-Alleviation-to-Makin-a-New-World-thetheory-of-three-zeros/
- Bartle I. & Vass P (2006), Economic Regulators and Sustainable Development ~ Promoting Good Governance, The University of Bath
- Berenbeim R.E., (2006). Ethical leadership: Maintain an ethical culture, Leadership excellence
- Buşoi M.S (2014), The ethical dimension of the sustainable development, proceedings of the 8th international management conference "management challenges for sustainable development", November 6th-7th, 2014, Bucharest, Romania
- Cero S.C,& Peters J.P.(1988,) Strategic management: Concepts and application, Mc Graw-hills education.
- Crăciu E., (2014) Business Ethics and Sustainability of Economic Development Bucharest Academy of Economic Studies, Romania
- Department of Trade and Industry (DTI). (2003), What is Sustainable Development. Retrieved July 05, 2017, from DTI: http://www.dti.gov.uk/sustainability/strategy/2.htm
- Deshwal P. (2015), Green HRM: An organizational strategy of greening People, International Journal of Applied Research; 1(13): 176-181
- Dolmaci N. & Kusat, N. (2012), Green Economy-Green Sustainability-Green Ethics. 3rd International Symposium on Sustainable Development.
- Dumitrana M, Dumitru M, Jianu I, Jinga G, Radu G (2009), Human Resources Role in Sustainable Development, Academy of Economic Studies Bucharest, Bucharest, Romania
- European Commission, (2009). Sustainable production and consumption, Publications office
- Freeman R.E, Pierce J., & Dodd R, (2000). Shades of Green: Business, Ethics and the Environment, from Environmentalism and the new logic of business: how firms can be profitable and leave our children a clean environment, Oxford university press, inc.
- Ganescu M.C. (2012). Corporate social responsibility, a strategy to create and consolidate sustainable businesses, Theoretical and Applied Economic, Volume XIX (2012), No. 11(576), pp. 91-106
- Inyang B.J, AwaH.O., & Enuoh R.O (2011). CSR-HRM Nexus: Defining the Role Engagement of the Human Resources Professionals. International Journal of Business and Social Science, Vol. 2 No. 5;
- Mihailović. B Cvijanović D & Simonović, Z. (2015), Role of business ethics in management of human resources, scientific review article, vol. 61, januar-mart 2015, no 1
- Organisation for economic co-operation and development, (2008), Promoting Sustainable Consumption: Good practices in OECD countries, 222 Rosewood Drive, Danvers, MA 01923, USA
- Rajab R. (2018) Building SGR in Nairobi park begins despite court order. Retrieved from www.thestar.co.ke/news/2018/03/03/buiding-sgr-in-Nairobi-park-begins-despite-court-order c172309
- Richardson E.J.(2008) Business Ethics. Mc Graw-Hill contemporary learning series, (19th edn)
- UNDP. (2015) Sustainable development goals.
- UNESCO,(2005), UNESCO and Sustainable Development, United Nations Educational, Scientific and Cultural Organization. UNESCO, France
- UNESCO, (2010) Education for Sustainable Development Lens: A Policy and Practice Review Tool, Section for Education for Sustainable Development, 7 Place de Fontenoy, 75352 Paris 07 SP, France
- (2018)Green management: Cost effectiveness & benefits, Retrieved study.com/academy/lesson/green-management-cost-effectiveness-benefits.html Last accessed on 5th
- World Commission on Environment and Development (WCED) (1987), Our Common Future, Oxford University Press, p8.