

REVIEW ARTICLE

Discussion on the Need for Sustainability Measures Due to Over Use of Natural Resources: with Reference to Technological Innovations and Individual Responsibilities

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Abstract

The study determines the need of sustainability and the measures to be taken by different agencies around the world. As we know it is not an issue of a particular region or area, it's the matter of whole world. So that the sustainability is a common issue for all, government level, international level, agencies, NGOs and other originations take this issue very seriously. As per the current data we find that due to the increase in population and urbanization there is a huge burden on our fixed natural resources especially forests, soil and water. And in recent time due to technology we observe poor quality of air and excess burden on our primary sector. So it is the responsibility of every individual to maintain sustainability of natural resources.

Keywords: Sustainability, Natural Resources, Innovations, Technological

Introduction

According to Merriam-Webster, "sustainability is the ability to be sustained or to continue for a long time without being completely used up or destroyed". It is the method of utilization of resources not in extinct manner. Natural resources which are considered as gift from God have been utilized in two different ways qualitative and quantitative, in this research paper we discuss about quantitative use only. Before we discuss the quantitative aspect of natural resources these resources have their qualitative aspects like we find peace when we visit some natural places like (woods, hill stations, beside rivers and seas sides etc).

As population increases day by day the demand for their basic needs also increase (food, shelter and cloths) and also increase the lust for more land not only for agriculture but also for the industries. There has been excessive exploitation of natural resources which cause negative externality on our health and calamite[8].

Technology innovation and industrialization sought profound social and economic changes, with this technology based cities were came up and countries are shifted from labour intensive to capital intensive (where most of the work was done by machines)[2].

If we consider the whole population of the world as one society, an individual is the member of this society, who enjoys through the use of all the natural resources which are available in his/her region. So it is the duties of every individual on their own level to do some positive efforts for protect the natural resources from over exploitation and should be devoted to the welfare of the society.

Literature Review

The environment is one of the basic public assets of a human system, and it must be therefore specially protected. The sustainability is necessary for all human systems and it is necessary to invoke the sustainable development principles in all human system assets. Sustainable development is understood as a development that does not erode ecological, social or politic systems on which it depends, but it explicitly approves ecological limitation under the economic activity frame and it has full comprehension for support of human needs[1]. There is growing interest in sustainability and sustainable development in the academic and policy literature. These two concepts have dominated the international development policy arena for over two decades now. In the policy arena, recent events such as climate change, the race to reduce fossil fuel emission, the transi-



tion to renewable energy, and the transition to a circular economy, have intensified the push towards sustainability and sustainable development[3]. Sustainable development has a very broad meaning depending on the dimensions being considered. Sustainable development has received much attention from policy makers and academics for four main reasons. Firstly, sustainable development is considered to be the end-goal of the United Nation's plan for the planet, and many countries have agreed to achieve the sustainable development goal[7]. Environmental sustainability is a global issue requiring contribution from and collaboration between various parties, which can include businesses, individuals, and also governments if seen from a larger perspective. It involves a multitude of various activities which include water treatment, waste reduction, pollution control, resource conservation by using renewable methods etc [6]. This goal of sustainability can be achieved by moving away from the present model of unlimited and unmonitored growth, consumption and wastage, to a model of monitored usage, savings, wastage and other factors without compromising on growth for a better future [4]. Sustainability is a topic of growing significance for companies just like the contribution of companies is becoming essential for sustainable development [10]. Sustainable development is the key for overall prosperity of the world. The word sustainable development has many definitions and the most popular definition had been coined by report of "Brundtland", which defines sustainable development as "development that meets the needs of present without compromising the ability of future generations to meet their own needs" [5]. To achieve sustainable development of prosperity and for protecting planet by 2030, SDG, i.e. Sustainable Development Goals had been developed[9]. Establishing the groundwork for sustainability is a task that will take discipline and commitment from all stakeholders. One of the ways to successfully implement a sustainability charter is through the effective reporting of EHS (environmental, health and safety) aspects and impacts [6]. In recent decades, society has faced environmental challenges which can jeopardize the long-term life on the planet. On one hand, the current rising of greenhouse gas emissions can cause a temperature rise of 5°C which means major differences for the Earth. Since this is the temperature difference between our present time and the last ice age, it is perfectly understandable the importance of this problem [4]. Creative drama can be adapted to the education for sustainable development and it can be used as an effective instructional strategy. The use of creative drama can be an effective teaching method for students to acquire new information and raise their awareness of the education for sustainable development. Though the number and severity of the local, national and global problems are rapidly increasing, the number of materials to be used to help students to achieve sustainable living gains in the class is limited[10]. Given the complexity involved in the interactions between economy and resources, the problem of management of resources must be seen through the lens of complex systems. Unlike optimizing problems, which lend themselves to analytic solutions, complex systems may be best understood using dynamic simulation techniques [9].

Objectives

- To know the sustainability and its need.
- To recognize about the diversification of natural resources.
- To know the measures taken by government, NGOs and different national and international bodies.
- To distinguish the relation between the technology, individual and sustainability

Materials and Methods

The current study is based on secondary source of data, which has been collected from different books, journals, newspapers, and various search engines are also used. Mostly reports and surveys of national and international bodies are employed.

Main Idea

Man is very important constituent of the ecosystem, he learns a lot from his environment. Environment provide him a lot of natural gifts which are free and abundant quantity to satisfy his wants and make his life easy and comfortable. An individual cannot produce these resources himself. All the natural resources provided to an individual by nature or natural environment free and in abundance like (solar energy, air, land, water, soil, natural vegetation, wildlife, minerals and free products fish, grass, roots and other natural products).

From last four decades it was observed that technology and industrialization shows an increasing trend in the world with positive economic growth. Apart from its positive side it has also a negative aspect. Like all human beings of the world have dream of comfortable life style, for that he is in search of best opportunity to earn handsome money. This opportunity was in big metropolitan cities all over the world, much working forces are migrate from rural or under developed nations towards the urban or developed nations. This led the rapid growth of population of cities; such a thing has led to various problems.

When more and more people will migrate to cities they would naturally expanded beyond limits leads to various problems. The congestion in cities would have a very bad impact on environment. Too much smoke of numerous vehicles would lead to suffocation, not only this need for more land for housing would have very bad effect on greenery. Every green field around cities would be devoured within no time resulting in ecological imbalance[4]. Cities are mostly congested but when more and more people flock them they become too much congested and prone to accidents. Overcrowding adds to pollution which is both dangerous and health hazardous[10].

In order to cope with the increasing requirements of the rapidly growing population natural resources are being exploited irrationally. As a result the natural resources are exhausted and the physical environment has become polluted. In order to meet the increasing demand of food grains for the rapidly growing population, the forests are being cut and used as agricultural fields. Nowadays forest area is only 31% (FAO's Global Forest Resources Assessment 2020) of the total area which has disturbed the balance of the world.

At present total land under the meadows, pastures and grasslands were decreased day by day. This has created problem for developing the cattle resources of the country, the forest lands are used for cattle grazing. To check this problem separate land is being ear marked for meadows during the process of consolidation of holdings.

The pressure on agricultural land is increasing with the rapid growth of population. As a result the per capita agricultural land has fallen per hectare. The remedy of this problem lies in checking the growing population.

Mineral wealth is exhaustive. Large scale mining has caused mineral wealth famine. The need of the hour is to minimize the exploitation and adopt measures to conserve these resources so that we may keep them for the generations to come.

In order to get maximum production, two or three crops is grown annually. Excessive cropping has resulted in the decrease of the fertility of the soil. Chemical fertilizers are being used to check it; it is bringing about a change in the chemical structure of the soil causing several other implications. In order to solve this problem, stress is being laid on the scientific use of chemical fertilizers.

With the rapid growth of population water, air, soil and even the sound in polluted. The ecological balance has been disturbed due to the decline of vegetation cover, thus pollution is to be checked, we do this by checking the rapid use of natural resources as raw material in industries.

Need to Conserve Natural Resources

There is no denying the fact that natural resources has great importance in our lives, that is why they should be conserved at any cost.

The need to conserve it arises all the more because of its following usefulness.

- Natural resources (forests, rivers, grasslands etc.) add the beauty of the earth.
- It provides habitat and food to human and animals. In the absence of natural resources our coming generation will be deprived.
- Most of the modern industries are directly depend on natural resources like coal and petroleum, timber industries etc.

So it becomes quite evident that natural resources play an important role in the life of all the nations of the world. Natural resources make a great contribution in the creation of economic structure of the nations. It is no exaggeration of the fact that the natural resources are the national wealth of the all nations of the world. Hence there is a great need of conserving the natural resources.

Sustainability Measures

Sustainability is one of the main global issues, the fast industrial growth acquisition of automobiles by a large number of people cutting and felling of trees indiscriminately and discharging chemical wastes in the rivers and such other development are dangerous and harmful to human life. This is a matter of grave concern for the entire humanity. Immediate effective's steps must be taken to minimise such pollution of environment as under:

- Recycling and renewing resources of energy.
- Cutting down vehicular pollution and testing of nuclear weapons.
- Initiating projects for producing biogas and providing modern sewage disposal system.
- Reasonable restrictions should be imposed on the use of public goods.
- Educate public about the importance of sustainability.
- Using resources carefully and giving them time to get renewed.
- Each person can contribute by reducing consumption, recycling and reusing things.
- The future of our planet and its people is linked with our ability to maintain and preserve the life support system that nature provides. Therefore it is our duty to ensure that all uses of renewable resources are sustainable.
- Conserve the diversity of life on the earth.
- Minimize the damage to natural environmental system is minimized.

Conclusion

Looking at the present scenario there is a tremendous role of technology and innovation in the fields of industrial growth, economic development, modernisation in cultivation etc. besides this it has negative externalities on our environment in the form of pollution and land degradation which cause climate change as observed from past decades. It is necessary for all on individual, national and international level that the use of natural resources through efficient manner. It's the need of hour to educate the common masses about the sustainability by using media (social media, news, and newspapers/ magazines) so that we can achieve our target of balanced use of natural resources.

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