

Natural Resources and Environmental Issues

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Abstract

Natural resources and environmental concerns have been prevalent not only in India, but in other countries of the world as well, but in most cases, India has been the major country that has experienced the depletion of natural resources and environmental degradation. In this research manuscript, main focus has been laid upon India; India is the most populous country in the world and with the impact of population explosion, there is exhaustion of natural resources and environmental degradation. The main areas that have been highlighted are rural poverty and environmental degradation, effects of disasters and natural hazards, assessing risks, impacts and opportunities from natural resources and the environment, precise insinuations for environment, sustainability and green development, greening rural development and economic growth and environmental sustainability. The issues have been taken into account and the measures also have been underscored that are essential in order to lead to preservation and sustenance of natural resources and the environment.

Keywords: Poverty; Environmental degradation; Disasters; Natural hazards; Sustainability; Green development; Economic growth

Introduction

Environment and natural resources preservation is vital to the economic growth of any country or a region in many ways but also susceptible to the extent that their utilization, management and sustainability can be affected by performance and deeds of various actions within the society. Natural resources and environmental issues matters and apprehensions are cross-sectorial but also renders input in every sector in terms of reducing poverty and destitute conditions of people and therefore need to be accorded highest precedence within the overall framework of the Poverty Eradication Action Plan (PEAP) which intends at reducing the fraction of people living in unconditional poverty to a level below 10% by 2017. In view of the cross-cutting nature of environment and normal assets issues, actions to address them require involvement of all relevant sectors. It is from this background that during the PEAP revision in the year 2003, the environment and natural resources PEAP revision sub-committee under the auspices of the then Ministry of Water, Lands and Environment prepared principles for conventional environment and natural resources issues in the PEAP, and other government sectors and programs. The overall objective of these principles was to provide direction and leadership to different sectors on how they can integrate cross cutting environment and natural resources issues in their sectorial preparations and series. The purpose of this research therefore, was to assess the extent to which environment and natural resources issues have been integrated, and propose actions that can accelerate the mainstreaming of environment and natural resources issues in government sectors and programs [1]. There have been identification of different issues that cause harm to the earth and regular assets; they have been named rustic neediness, populace blast, deforestation, industrialization, uncalled for waste administration, catastrophes and characteristic dangers.

Rural Poverty and Environmental Degradation

The thin layer of soil that covers the surface of the earth is the key to the well-being and survival of individuals, without proper environmental conditions there would be absence of crops, food, plants, animals, forests and even human beings; about 40% of the surface of the earth and more than one billion people are affected by land degradation; degraded lands are homes to the most poverty stricken sections of the rural people. In India, in rural areas, most of the individuals are living in the conditions of poverty; climatic factors, demographic factors, personal causes, economic causes and social causes are the main factors that lead to the conditions of poverty. Rural poverty-alleviation programs are located in ecologically frail and marginal environments. In these areas, the poor are often fastened into patterns of natural resource degradation by their lack of access to productive resources, institutional services, acknowledgment and technology. Without these resources, they are compelled to overload already eroding lands in order to survive. The increased pressure on the land, through deforestation, overgrazing and over cultivation causes a decline in soil fertility and production, and thus aggravates poverty. This circular, cause-and-effect relationship between rural poverty and environmental degradation is apparent, unless degradation is addressed directly, the sustainability of rural development schemes will be destabilized and endeavors to lessen rural poverty will be endangered [2].

Effects of Disasters and Natural Hazards

The effects of disasters and natural hazards are destructive which lead to dire consequences. Four main kinds of effects have been identified [3].

Environmental effects – The environmental effects can be destruction of lands, homes, buildings, and surroundings; there are huge losses caused in water supplies, food availability, as there is destruction of crops, immense loss of life is caused by natural calamities and there is presence of human bodies and animal carcasses

which remain unburied. The environmental effects vary from disaster to disaster such as earthquakes may destroy buildings but not crops, on the other hand, a cyclone may cause destruction in both.

Effects on health – Sudden natural disasters may cause not only widespread death but also massive social disruption such as famines, epidemic diseases; injuries are also caused by the natural disasters; when people get affected by disasters they tend to move to another place and this movement may lead to transmission of diseases, and there is prevalence of malnutrition, as the food and water supplies get destructed, there is scarcity of food and water quality and quantity.

Economic, social and political effects – Disasters lead to destruction of economies, individuals have to leave their jobs and get involved in disaster related activities or they become jobless if their place of work gets affected by the disasters. There is loss of machinery and equipment as well; farmers, shopkeepers and fishermen are the individuals who are affected by the disasters in most cases. Huge monetary and financial losses are caused by disasters and economic, political and social conditions of the region get severely affected.

Administrative and managerial effects – Administrative problems become more complicated and tedious due to emergence of disasters. Loss of community leadership, when there is loss of leaders due to death or when they get injured then the leadership functions get affected; formal organizations are the ones that get most disordered by the occurrence of disasters, even though small community organizations can function without leaders but formal organizations cannot exist if there is no skilled personnel available, there is severe damage to critical facilities and lifelines such as electrical generating and transmission facilities, water storage, purification and pumping facilities, sewage treatment facilities, transportation facilities, police stations, hospitals and other private buildings.

Assessment of risks, impacts and opportunities from natural resources and the environment

In order to find solutions to the problems and issues concerning the environment and the natural resources, there have been the following questions that need to be answered [4]:

1. How did natural resources and the environment throw in to the conflicting situations and how could they participate in conflict degeneration?
2. How were natural resources and the environment impacted by the incongruity and what are the suggestions for the welfare of human health, livelihoods, employment, education and security?
3. What opportunities are present for natural resources and the environment to concretely contribute to peace building?

Precise insinuations for environment, sustainability and green development

When all the issues have been analyzed that affect the natural resources and the environment, then there have been precise insinuations for environment, sustainability and greenery development. Then the following domains of challenges need to be taken into account [5].

Climate and energy considerations – The climatic factors and the energy sources need to be taken under consideration, for example, the climatic factors are variable and the sources of energy, water, electricity

have to be adequately preserved in order to lead to efficient environmental conditions, poverty alleviation and sustainability.

Natural cycles and their connected social processes – Natural cycles including water, is meant for a number of purposes, there have been many social processes connected with water, as water is considered to be the main aspect for survival, it is used in agriculture for irrigation purposes, generating power, survival, in industries and factories and other purposes. These have to be taken care of in order to restrain the natural resources and the environmental issues.

The urban-rural nexus – The rural individuals are migrating to urban areas in search for a better livelihood, job opportunities, education and well-being, this is causing a depletion in natural resources; such as urban areas are becoming more and more congested, there has been increase in deforestation in order to construct dwellings and houses for the people, roadways are getting diminished due to increase in vehicles and there has been a major increase in pollution of all kinds, air, water, sound and degradation of land and other surroundings.

Urban infrastructure and transport systems – With the impact of globalization, increase in industrialization, infrastructure, technology, vehicles and innovation methods; the urban areas are getting overcrowded and jam-packed. The rural individuals are migrating to the urban areas in search for better job opportunities in industries and other sectors, this has led to water pollution to a major extent and other depletion of natural resources; with the increase in the transportation, there has been an increase in air pollution and that is in turn causing many health problems to the urban dwellers. Under the point of urban infrastructure and transport systems, it has been understood that there has been a major increase in air pollution that has caused many health problems as there is lesser greenery due to increase in urban population and dwellings.

The green development in future and its economic impacts – Plantations, trees and other greenery is very essential in order to preserve natural resources and for the better livelihood of the individuals, animals, industries, agriculture, crops and forests. The economic impacts for green development are always positive, for instance, encouragement of greenery leads to a decrease in air pollution, the other factors such as water security, coastal communities, energy security, other infrastructural facilities, health related aspects, tourism, agriculture and forestry, food security, natural ecosystems, and above all sustainable development for all living things is implemented in an adequate and an effective manner.

Greening Rural Development

Greening provincial advancement alludes to the assortment of exercises that redevelop and ration the regular asset base, enhance and utilize cleaning materials, advances and procedures to make environment well-disposed items, employments, undertakings and occupations. There have been five extensive results of greening rural development [6].

Improved resource conservation - Rural development schemes especially MGNREGS and IWDP focus on restoration of natural resources. Conserving and regenerating land and water resources enhances their productivity, leading to increased agricultural outputs and improved livelihoods derived from agriculture, forests and pastures. These schemes can assist in reducing run-off and soil losses, recharge groundwater, increase vegetative cover and improve

biodiversity, and thereby, expand the productivity of natural resources and ecosystems.

Improved resource efficiency – Rural development schemes aims to improve the efficiency of natural resources in rural livelihoods and essential services. Under IWDP, there is an opportunity to support farmers and agricultural workers to adopt practices to support irrigation water. This can be implemented by adopting appropriate crops, farming techniques, irrigation systems and improved field irrigation methods.

Reduced negative environmental impacts – Greening rural development schemes can potentially reduce the negative environmental impacts of economic development such as pollution, waste generation etc. Solid and liquid waste management under the Nirmal Bharat Abhiyan scheme improves local sanitation and hygiene and in this manner the well-being and health of local residents.

Strengthened climatic resilience of communities – The resilience of local population can be enhanced by reducing the risk of climatic variations such as droughts, cyclones and floods. Afforestation, plantations, fodder management and vegetation belts in the coastal areas lead to livelihood resilience and enable the communities to cope with the climatic changes.

Contribution to climate change mitigation – Large scale forestry and soil conservation measures can seize carbon and greenhouse gas emissions [6].

Economic Growth and Environmental Sustainability

India has been committed to economic growth and environmental sustainability. The first five year plan (1951-1956) aimed at economic stabilization and investment in the agrarian sector. The plan supported community development taking into consideration the social and economic welfare of the rural sector. The second five year plan aimed at structural transformation with an emphasis on heavy industrialization. The first two plans laid the foundation for development planning in India. The development strategy of the country has mainly emphasized upon economic development. With the increase of velocity of economic growth, the works and the pressures to bring about changes and improvements began to strengthen and therefore the need to pay greater attention to the management of water, forests and land began to enlarge. These are largely associated with the development of the rural sectors not only in India but in other countries of the world as well [6].

Environmental degradation has been expressed as loss of fertile soils, desertification, unsustainable forest management, reduction of freshwater availability and an extreme biodiversity loss rate. There has been a high correlation between economic growth, rural development and environmental sustainability. Sustainable use of environmental resources can contribute to augmentation and steadiness. It is essential to contribute to the environmental resources to increasing the productivity of investment in agriculture, infrastructure and natural capital. Success in achieving the conservation of the environment will contribute effectively towards rural development, water supply, land management and agricultural activities will be fulfilled effectively. The Schemes of the Ministry of Rural Development are well organized to deliver green endings i.e., to restoring and enhancing the ecosystem services and natural capital [6].

Natural capital is often esteemed and understood most excellent at the local level, and local knowledge is essential for useful solutions.

Communities and societies need to be active supporters of the conversion to sustainable development, alleging their rights and also fulfilling their responsibilities in terms of sustainable management of natural resources. Rural development schemes provide a strong opportunity to cumulative small inventiveness in several locations to improve natural capital on a comprehensive scale. These self-governing institutions and their capacities will be answers to greater effectiveness of regulatory and market instruments in ecosystem rejuvenation and perfection of natural capital [6].

Discussion and Summary

The depletion of natural resources and environmental degradation are common and are prevalent worldwide, in India, there have been many reasons that lead to the depletion of natural resources and environmental degradation, these are effects of natural calamities and disasters, population explosion, deforestation, increase in transportation, eviction of fumes and poisonous gases from the industries as well as vehicles cause air pollution, throwing of waste into the rivers and lakes cause water pollution and conditions of poverty; with the impact of urbanization and migration of rural individuals into the urban areas in search for better livelihood has led to an increase in all kinds of pollution and deforestation, in urban cities especially in the national capital of Delhi, trees and plantations have been cut down in order to construct residential areas for the urban dwellers and this has been the major source of environmental degradation. Delhi has been considered to be the most populous as well as the most polluted city in the world. Other dire consequences have been that as a result of environmental degradation and depletion of natural resources there has been an increase in the levels of paucity, individuals are getting more prone to living in destitute conditions in rural as well as urban areas.

Deforestation has resulted in calamitous consequences, the rural people who are mostly dependent upon forests for their livelihood, when the forests and trees get chopped down their agricultural occupation suffers, they depend upon forests for their food and to obtain wood, hence undergo tough conditions as a result of deforestation. Natural calamities and disasters are natural as well as man-made; when they occur unexpectedly, they cause threatening consequences upon the lives of the individuals as well as plants and animals, the effects can be environmental, health, economic, social, political, administrative and managerial. In order to investigate the measures that would led to preservation and safeguarding of the environment and the natural resources, it is necessary to access the risks, impacts and the opportunities that are available from these two main aspects, how the life of the individuals would suffer threats, perils and be at jeopardy, what would be the impacts and what are the opportunities available have to be analyzed.

For the environment, sustainability and green development, the specific suggestions have been concerning the climate and energy considerations, natural cycles and their connected social processes, the urban-rural nexus, urban infrastructure and the transport systems, and the green development in future and its economic impacts. The spread of greenery has been considered to be a crucial factor in order to curb weakening of natural resources and environmental degradation, there have been number of activities that are as a result of greening of rural development, improved resource conservation, improved resource efficiency, reduction in the negativities of environmental impacts, strengthening of the climatic resilience of communities and contribution to climate change mitigation. India is a developing nation,

with the increase in industrialization and development of technology, innovation and other advancement, it is essential that measures and procedures should be implemented in order to curb all kinds of pollution, plant more trees, in other words, encourage greenery and follow particular waste management procedures; in order to preserve and safeguard natural resources, it is mandatory to follow appropriate measures and steps, as it is up to the human beings to curb man-made disasters such as industrial explosions to safeguard their lives.

References

1. Keizire BB, Mugenyi O (2006) Mainstreaming environment and natural resource issues in selected government sectors status, considerations and recommendations. ACODE, Kampala, Uganda.
2. <http://www.ifad.org/pub/enviorn/EnvironENG.pdf>
3. Schramm D, Dries R (1986) Natural hazards: causes and effects. Study guide and course text. Disaster Management Center.
4. http://postconflict.unep.ch/humanitarianaction/documents/05_01-07.pdf
5. http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/citiesoftomorrow/citiesoftomorrow_environmental.pdf
6. UNDP (2012) Greening Rural Development in India.