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26	An Assessment on Integrated Drought management in India Dr. Tilekar Sharad Balasaheb	109-111
27	The Critical Study of Cropping pattern and Crop Concentration in Solapur District Dr. Gavakare Rajesh Bhimrao	112-116
28	Study of Relationship between Population Density and Socio- Economic Development of Hingoli District, Maharashtra Dr. Vajinath Kantiram Chavan	117-120
29	Spatio-Temporal Variations in the Beach Dune Complex at Diveagar, Konkan coast, Maharashtra. Gaurav Gamre, Anargha Dhorde	121-129
30	Study of Changing Literacy Composition in Rural Area of Jalgaon District 2001 To 2022 Devendra Anantramji Maski, Dr. Sanjay Devidas Bhaise	130-132
31	Morphological Redescription of A Freshwater Ciliate Paramoecium Caudatum (Ciliophora: Oligohymenophorea) From Saradwadi Dam Deshmukh N. Z.	133-136
32	The Impact of Technology on the Environment: Promoting Sustainability and Mitigating Negative Effects Dr. Y. Savithri, Dr. P. Ravi Sekhar, T. Sreedhar Murthy, Dr. S Smitha, P. Mahesh, B. Manaswitha	137-139
33	Bacteriological Analysis of Drinking Water in Sarangpuri Lake,Arvi.Dist:Wardha Ujwala W. Fule	140-141
34	In Situ Conservation of Fauna in Eturunagaram Wild Life Sanctuary at Mulugu District Dr. Polasani.Veena, Challa. Krishna	142-146
35	Analysis of Paddy field Soil Samples from Bramhapuri Tehsil of Chandrapur District in Maharashtra for its Physico-chemical parameters Supriya Gedam, Dr. Mundeep G. Awaley	147-150
36	Role of Nanocarriers and Nanosensors in Drug Delivery System: A Review Dr Jayshree S. Thaware	151-154
37	Depletion Of Natural Sunscreen: Causes And It's Effects Ankita P. Shelke	155-157
38	The Effect of Mycorrhiza on Growth Parameters and Antioxidant Activity of the Medicinal Plant 'Ruta Graveolens L.' Prerana D. Jadhav, Mahesh N. Kharde, Anil S. Wabale	158-164
39	Role of Education in Sustainable Development Sonawane Gatha Sunil, Ingle Vasant Gulabrao	165-168
40	Role of an Individual in Conservation of Natural Resources Dr. Mohammadi Shaikh, Dr. Syed Azaz Ali	169-172
41	Sustainability and Carbon Footprint Dr. Sevela Sai Bhavani, Dr. Saileja	173-177
42	Environmental Awareness towards Sustainable Development Dr. Baviskar Shantaram Gambhir	178-184
43	Impact of Festivals and Adaptions to Eco-Friendly Practices and Green Methods in Festivities for a Sustainable Future Dr. Sevela Sai Bhavani, Dr. Saileja	185-189
44	Treatment and Disposal of Most Hazardous Bromine from Solid Waste In Udaipur Using Remote Sensing and G.I.S. Techniques Kundan Kunwar Chouhan	190-192
45	“Requirement of Accurate And Innovative Solid Waste Management Practices For Sustainable Development In Udaipur” Dr. Sadhana Kothari, Kundan Kunwar Chouhan	193-198
46	A Study on the Challenges Faced By Transgender in Kanniyakumari District Rabiya B. R, Dr. R. Thanga Sheela	199-201
47	Environmental Awareness in Rachel Carson's The Silent Spring Dr. M. Kanika Priya	202-205
48	Perspectives in Ecofeminism and the Present Scenario Dr. Manisha Yuvaraj Suryavanshi	206-208
49	The Impact of Natural Environment on Literature Dr. Shailaja B. Kuchekar	209-213
50	The Study of Enviornmental Impat on Human Behavior with Reference to William Shakespeare's 'As You Like It' Dr. Malini Ramlal Adhav	214-216
51	Literature and Social Sustainability Preeti Roberts, Naya Raipur, Dr A. Vijayanand	217-219



Role of an Individual in Conservation of Natural Resources

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Abstract

Several studies and researches have been conducted on the role of an individual in conservation of natural resources however what exactly constitutes natural resources? How much do we know about how it is classified? How to conserve it? The present paper seeks to examine these vital questions with a view to providing answers from previous studies. The paper employed a desktop approach to provide answers to the research objectives. Specifically, the paper uses a descriptive approach to gather information from peer reviewed publications such as, journal articles, environmental organizations reports and books. It was found that, Man is the only organism who has disrupted the delicate balance existing in the natural ecosystem of earth to fulfill its infinite requirements. It is not at all the fact that, man should not use the natural resources but using in excess and unplanned way, gives rise to an unbalanced condition in the environment. Therefore, proper utilization and management of nature and its resources should be made, which may be termed simply as conservation.

Keywords: Environment, individual, natural resources, conservation.

Introduction:

Meaning of conservation:

In the words of Raymond F. Dasman of International Union for the Conservation of Nature and Natural Resources (IUCN), conservation is defined as the rational use of the environment to provide a high quality of living for the mankind. According to Odum (1972), the conservation may be defined "as the process which is concerned with the use, preservation and proper management of the natural resources of the earth and their protection from destructive influences, misuse, decay or waste".

Statement of the Problem:

Conservation makes important contributions to the social and economic development of any country. The interest in conservation is not sentimental one but the rediscovery of a truth well-known to our sages. The Indian tradition teaches us that all forms of life, human, animal and plants are closely linked that disturbance in one gives rise to imbalance in the others. The present research therefore examines the concept of natural resources and its Conservation with a view to determining what natural resources are, how they are classified, managed and conserved.

Methodology:

This paper which is a review of literatures relied heavily on secondary data as is the case with

most desktop study where existing information are used for analysis and to draw vital conclusions. Some of the specific sources of data for the study include books, journal articles, unpublished papers, government reports, organizational and private webpages. This type of research approach is employed when a substantial amount of work has been done on a research topic and when the intention of the study is to answer specific questions based on previous works. It is for these reasons that the present paper utilized this approach to examine what different researchers have said on natural resources, role of an individual and its Conservation, its classification and management.

Current Types of Conservation Issues:

There is variety of basic conservation methods used to protect global natural resources. Although each resource has a unique set of conservation problems and solutions all resources are interconnected in a complex and little understood web. Scientists have learned that damaging one thread of the web may weaken the entire structure.

Biodiversity Conservation:

Biodiversity denotes the number and variety of different organisms and ecosystem in a certain area. Preserving biodiversity is essential for ecosystem to respond flexibly to damage or change. Ejumudo and Nwador (2014). Environmental management and sustainable development in

Nigeria studied and recommend that there should be genuine adoption and holistic application that will embody all the components of the environment; there should be strict enforcement of environmental laws for natural crude oil exploitation and exploration. The study concludes that importance of environmental management in sustainability of natural resource in both developed and developing countries cannot be over-emphasized because environment management has the tendency of creating the conditions that are critical to intra-generational and inter-generational principles and underlie sustainable development globally.

Ogunwale (2015). Deforestation and greening the Nigerian environment. Analysis from the study revealed that despite the promulgation laws on deforestation in Nigeria, About 70% of the rural dwellers still engage in an unfriendly exploitation of fuel woods, hunting, timber logging activity, bush burning and mining and the above mentioned has been the hindrance for achieving green environment in the study area, Recommendations included: i. There is need to improve the legal and political frameworks for forest conservation and management in the country. ii. Emphasis must be on provision of basic education on forestry and wildlife to the citizens of Nigeria. iii. Government should employ more field staff for effective monitoring of forest areas.

Conservation of wild life:

Conservation of wild life deals mainly with the preservation and protection of both flora and fauna, in their natural habitats, making them to reproduce and give rise to fertile offspring without human interference. Wild life conservation in this sense refers to the management of nature's living resources. Wahab (2016). Wild life environmental conservation: A case study of Oba Hill Forest reserve. Questionnaire and personal interviews. The result showed that 25% of the respondents were found to be hunters in the largest community in the study area. 53% make use of short guns and locally made guns and trap as their hunting tool while 57% of the respondents are use hunting exhibition strategies by creating forest fires during this hunting operation A "Wild Life Protection Act" was implemented in 1972. Under this act all the endangered (threatened) animals are now declared as protected animals. Again wild life (protection) Amendment Bill was enforced in 1991.

Endangered species

Animals facing the threat of extinction because of various unfavorable environmental factors extensive hunting and trapping by men in their natural habitats are known as endangered or threatened animals. Agencies like International Union for Conservation of Nature and Natural resources (IUCN), maintains a Red list of threatened

species in a book known as "Red data book". Desai and Baskaran (1996), Menon et al. (2005) and Vidya and Thuppil (2010). There are a number of studies in India on the road kills along the highways. Sharma (1988) reported animal deaths on NH 11 in Bharathpur. Based on one year long observations, he recorded 439 casualties, which included amphibians, reptiles, birds and mammals. Gokula (1997) reported mortality in snakes due to highway traffic in the dry deciduous forests of Mudumalai Wildlife Sanctuary, Tamil Nadu. Kumara et al. (2000) reported road kills in Indira Gandhi Wildlife Sanctuary. A month long study by Vijayakumar et al. (2001) reported mortality of herpetofauna from the highway segments passing through rainforest fragments and tea gardens in the Anamalai hills, where more amphibians were killed.

Wild Life Conservation in India

India is rich in Wild life. The endangered species of plants and animals are protected. The Indian Board of Wild life (IBW) works in collaboration with World Wild life Fund (WWF) to conserve wild life with the assistance of central and state Governments. Danish study (Laursen, 1981). A total of 228 individuals of 32 species of birds were found dead on the roads in Kumbhalgarh Wildlife Sanctuary (KWS) in Rajasthan (Anil Kumar 2004). Coffin (2007) assessed ecological effects of transportation systems and more specifically roads. According to Coffin (2007), the roads have a wide variety of primary, or direct, ecological effects as well as secondary, or indirect, ecological effects on the landscapes that they penetrate. Ecological effects include the loss of wildlife habitat, disturbance and pollution of physical, biological, and chemical environment, death of animals and acting as a movement barrier (Van der Zande et al., 1980; Bennett, 1991; Forman and Alexander, 1980).

Diana, Kenneth, Corelli and Hoffman (2010). The Contribution of wildlife to sustainable natural resource utilization in Namibia: The result showed that Namibia achieved natural resource management through protection act for natural resources in Namibia which has been in operation since 1990. Effective environmental laws should be enforced towards natural resource use in Namibia and incentives given out to promote more conservation in the country. Promoting sustenance of wildlife in Namibia would create economic incentives for investing into wildlife resources on private, communal and state land. Sustainable utilization of wildlife could assist the management of wildlife as a natural resource and economically viable production system.

Forest Conservation:

By decreasing the amount of carbon dioxide in the atmosphere, forests may reduce the effects of global warming. Rim-Rukeh, Ierthievivie and

Agbozu (2013). Traditional beliefs and management of natural resources: Evidences from selected communities in Delta State, Nigeria. Result of the research revealed that forests were regarded as the property of the gods and information about such forests are kept secret from outsiders and residential homes are built far away from forest areas. Since, traditional beliefs has yield positive result in IUCN red list of biodiversity conservation; it was recommended that government should adopt traditional approach to build in sustainability into management of natural resources by rewarding them with handsome incentives as encouragement. Traditional religions and cultural practices have contributed to conservation of resources through the ascription of psychic powers forestlands; the traditional beliefs have helped in enforcing rules and regulations for environmental preservation because people are refrained them especially as it is related to sacred places.

Arijit, Shrit, Deepak, and et al. (2016) carried out a study on perspective of forest biodiversity in Northeast India and asserted that loss of biodiversity in the recent made the country to pay adequate attention to biodiversity issues by adopting the concept of forest resource carrying capacity. Additionally, they claimed that India is one of the countries in South Asia known with increased availability of natural resources because they adopted sustainable concepts with the development of coral reef where natural resources are naturally conserved.

Soil Conservation:

Soil-forming processes may take thousands of years, and are slowed by natural erosion forces such as wind and rain. Hui (2015). Studied Carrying Capacity of the Environment. The result shows that ongoing agricultural intensification, over-fishing, industrialization, and urbanization affects the natural ecosystem function and creating an unstable environment in South Africa. Key recommendation of the study included: i. Distinguishing new from mature natural resource in communities. ii. Designing efficient conservation and restoration plans. The research basically concludes that human society relies heavily on ecosystem services and the benefit from biological diversity for cleaning air and water, stabilizing weather, maintaining soil fertility, and discovering new antibodies, and providing food, timber, cloth, medicine, industrial materials together with minerals. To sustain humanity, we need to manage the Planet's biosphere within its bearable margin to avoid disruptive regime shift.

Water Conservation:

Majule (2010). Towards sustainable management of natural resources in the Mara river basin in North east Tanzania. Key result of the research showed that crop cultivation and livestock

keeping along the basin were the major socio-economic activities threatening the basin since 75% of the population engage themselves in agricultural activities. To ensure that water resource is properly managed, government of Tanzania has to develop a structure on which river basin under the ministry of water has a mandate of managing water resources effectively. Human activities on the river basin have been identified over the years to have significant implication on natural resource sustainability and productivity of Mara River. About 65 percent of the global freshwater supply is used in agriculture and 25 percent is used in industry. Freshwater conservation therefore requires a reduction in wasteful practice like inefficient irrigation, reforms in agriculture and industry, and strict pollution controls worldwide.

Energy Conservation:

There is a global need to increase energy conservation and the use of renewable energy resources. Renewable alternatives such as waterpower, solar energy, wind energy, and geothermal energy are efficient and practical but largely underutilized because of the ready availability of inexpensive, nonrenewable fossil fuels in industrial countries. P. Amala Rao (1987), The energy perspective enunciated in the 7th plan documents envisages a threefold rise in the electricity requirements in the country from 155 MKWH in 1984-85 to 464 billion KWH by 2000 A.D. Rapid development of electricity generation thus becomes imperative in view of the fact that the promotion of the alternative i.e. non – conventional sources of energy is yet in the pilot stage.

Minerals:

Until recently little attention was paid to conservation of mineral resources because it was assumed that nothing could be done to save them anyway. But now these assumptions have proved wrong and it is believed that severe shortages would develop tomorrow. The conservation of minerals, therefore, has become a serious concern for conservationists all over the world. Babagana, Mohammed and Garba (2012). Environmental impact of Natural Resources Exploitation in Nigeria and the way forward. Over 55% loss of natural resources in the study areas which is the leading factor of global warming, poor soil structure and extinction of wildlife. Mining activity in the study area has also caused pollution (air, water, noise and land) and liquid waste disposal of toxic substances as well as socio-cultural problems such as communal conflicts. Environmental Impact Assessment (EIA) should be well documented for remedies or compensation for damage done.

Conclusion and Recommendation:

This paper discussed environmental sustainability of natural resources through a review

of works of previous authors on natural resources. Previous authors viewed natural resource depletion as a threat to the survival of the environment and mankind. They argued that its causes came from anthropogenic activities such as deforestation, bush and forest fires, poaching activities, agricultural activities and infrastructural development triggered by high human population in the quest of meeting their demands. Most authors agreed that involvement of the local community in natural resource management can go a long way because people still have belief in obeying their local rules, especially as it relates to sacred areas. This study, therefore, concludes that to build in environmental sustainability into management of natural resources requires their sustainable utilization and the integrated commitment of all stakeholders who must see them as environmental assets upon which man's life and survival depend.

References:

1. Adaptation Options. In: Handbook of Climate Change and Agroecosystems: Impacts, Adaptation, and Mitigation (eds. Daniel Hillel and Cynthia Rosenzweig).
2. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.).]
3. Aggarwal, P.K., Pathak, H., Kumar, S.N. and Sharma, P.K. (2012). South Asia Perspectives on Climate Change and Agriculture
4. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of Climate Change.
5. G.R.Chatwal and Harish Sharma (2005) A Text Book of Environmental Studies, Himalya Publication House.
6. INCCA (Indian Network for Climate Change Assessment) (2010). Assessment of the Greenhouse Gas Emission: 2007, Ministry of Environment & Forests, Govt. of India, New Delhi
7. Kaseva, M. E., & Gupta, S. K. (1996). Recycling—an environmentally friendly and income generating activity towards sustainable solid waste management. Case study—Tanzania. *Resources Conservation & Recycling*, 17(4), 299-309.
8. Kasim, A. (2007). Towards a Wider Adoption of Environmental Responsibility in the Hotel Sector. *International Journal of Hospitality & Tourism Administration*, 8(2), 25-49. https://doi.org/10.1300/J149v08n02_02
9. Lutz, A.F., Immerzeel, W.W., Shrestha, A.B. and Bierkens, M.F.P. (2014). Consistent increase in High Asia's runoff due to increased glacier melt and precipitation. *Nature Climate Change*, 4(7): 587-592.
10. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller, eds. Cambridge, UK: Cambridge University Press. 996 pp.
11. Smil, V. (1993). *Global Ecology: Environmental Change and Social Flexibility*. London: Routledge.

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