

Environmental Sustainability and Human Health

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**SRF Publication
Jabalpur (M.P.)**

Environmental Sustainability and Human Health

Year : 2020
Author : **Dr. Deepika Saini**
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ISBN : 978-93-88336-38-3
Price : Rs. 650/-

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Print & Publication By

SRF Research Journal & Book Publication House

320 Seva Path Sanjeevni Nagar, Garha, Jabalpur (M.P.)

Email – srfjournal21@gmail.com, www.srfresearchjournal.com

Phone – 9131312045, 9770123251, 0761-4036611



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Foreword



I feel highly privileged in writing a forward note to the edited research e-book entitled "Environmental Sustainability and human health" edited by Dr. Deepika Saini, Assistant Professor, Department of Zoology, CLM, Haridwar and Dr. Vimal K. Saini, Principal, Shri Gurunanak Mahila Mahavidyalaya, Jabalpur (M.P.). The title of the e-book is highly significant as now a day's environmental imbalance is the root cause for climatic variations and health hazards in humans.

This e-book gives an overview of issues in health, environment and sustainable development which are worldwide concerns now a day. The spectrum of health, environment and development hazards has changed considerably over the millennia of human existence. Human excessive interference in the nature is the main root cause for all the globally growing turbulence. Environmental sustainability is important for maintaining earth's ecology and other life support system. If this system declines human population, well-being and health will be jeopardized.

Environmental health issues transcend national boundaries, and thus are global concerns. Global environmental disruptions and changes have impacted human health adversely. The impact can be both acute in nature, such as water borne diseases due to poor sanitation and as well as chronic like skin cancer from arsenic exposure in ground water and ultraviolet exposure. We need to take up these issues seriously.

I am of the opinion that it is the noble duty of the people whether they are academicians, technocrats, Scientists, students including governmental and non-governmental organizations, to take these types of global and environmental issues for discussion as they are highly needed for policy making.

New generations must have a sensitive and scientific approach towards these problems as they have an important role to play in serving the nation and the society through their contribution in their own unique way.

I wish that the edited e-book will be able to serve the purpose for which its genesis has been done.

Prof. Sardul Singh Sandhu

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Preface

Sustainable development is the development that fulfills the need of present without compromising the ability of future generations to meet their own needs. The main goal of Sustainable development is to establish harmony between environmental sustainability, economic and socio-political sustainability.

Sustainable development and public health issues are quite strongly correlated, being connected and conditioned by one another. Economic development has changed the characteristics of environmental health hazards, resulting more indirect global and delayed health effects. Economic development is characterized by industrialization, technology adoption and globalization is also changing the spatial and temporal scales over which environmental determinants affect human health.

Present e-book **“Environmental Sustainability and Human Health”** is an outcome of research papers presented in International E-Conference on the topic **“Role of sustainable development in combatting climate change and improving human health issues”** organized by Chamanlal Mahavidhyalaya, Haridwar (Uttarakhand), Shri Gurunanak Mahila Mahavidyalaya, Jabalpur (M.P) and Indian Tech IT Solution, Jabalpur (M.P) on 21 June, 2020. The theme attracted the attention of high profile academicians and research scholars as well. They shared their valued opinion on the topic in such a grave and sincere manner that we are naturally obliged to give those valuable thoughts an alluring shape of an e-book.

As the theme was multidisciplinary in nature, the e-conference was attended by academicians, research scholars, students etc from different states of India and other countries as well. They explored the theme from different point of views. Many papers were received but after screening only worthy papers are included in this e-book.

In the successful completion of the e-book, we are at first thankful to the almighty, the divine power. We are greatly obliged to each and every person for extending his/her helping hand.

We have a deep credence in our readership who would surely not hesitate in expressing their critical opinion for the betterment of the present book and our future endeavors.

Wishes
Dr. Deepika Saini
Dr. Vimal K. Saini
Editors

From the Editor's



Dear Readers,

Environmental issues are very serious topics and need to be discussed frequently. As we all know, over the past number of years, the impact of climate change has become more apparent. Environmental sustainability is highly required and science is clear about this because of anthropogenic global emergency. We are in the midst of a climate emergency facing a massive ecological and humanitarian catastrophe that will by far exceed the current environmental issues prevailing now-a-days. The issues that arise in environmental health ethics are often complex, interdisciplinary, dynamic, and global in scope. To find a satisfactory answer for environmental health issues becomes more important as environmental impacts on human health continue to mount and we learn more about symbiotic association between environment and human health.

Climate change increasingly affects people's health and well-being, as do other global environmental changes such as loss of biodiversity. Climate change is increasing the frequency and intensity of heatwaves, droughts, extreme rainfall in many areas.

It's a noble duty of each and every individual to have a scientific outlook towards the environmental challenges and do the needful.

Thanks and Wishes.....

Dr. Deepika Saini

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From the Editor's

Dear Readers,

All organisms depend on their environment for energy and materials needed to sustain their life. The pre-requisite for a sustainable living requires clean air, potable water, nutritious food and safe places. Advances in agriculture, sanitation, water treatment and hygiene have had a far greater impact on human health than medical technology. Although the environment sustains human life, its deterioration harms human health resulting in disease and infection. Environment hazards increase the risk of cancer, heart disease, asthma or lung infection and much other illness. Human behaviour that threatens environmental sustainability includes the rapidly growing human population and the depletion of natural resources such as water, forest and fossil fuels. A classic example of human impact on the environment is the burning of fossil fuels resulting in the emission of carbon dioxide, which contributes to global climate change. From the air we breathe, the water we drink and use, life on earth depends on the natural resources and environment around us and to preserve the life on earth, it has become essential to practise sustainability.

Sustainability is not an independent entity. It is a blend of three components- Environmental conservation, Social responsibility and economic development. The way we conserve the environment defines the fate of the environment which in turn decides our future. In all, there is a strong relationship between human health and environment sustainability. Some of the ways in which we can protect our environment and human health include waste management, water and air pollution control. However, with increasing human population, pollution has become a great concern.

Pollution prevention, however, is a key issue and an important component of sustainability. The best way to deal with pollution is to prevent it from being created in the first place. This means finding new efficiencies, doing things smarter and valuing every resource. In conclusion, reducing and managing pollution may decrease hazardous environmental impacts on human health.

Best Wishes

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