



Adventist
Health Ministries
GENERAL CONFERENCE



Seventh-day
Adventist Church

LET'S CELEBRATE **ENVIRONMENT**

E is for environment, a sustainer of life.



CELEBRATIONS
LIVING LIFE TO THE FULLEST

A group of college students went to Punjab on a trip to see its rich culture and traditions and its beautiful fields full of swaying crops. They took in the greenery all around them. People were working happily in the fields. Many different crops were growing, which looked beautiful and healthy. Then they asked, “How does Punjab grow such rich vegetation? What is the secret behind it? Is this the land extremely fertile, or do they use a specific method or manure?”

To their surprise, they learned that farmers in Punjab use excessive pesticides in their farming. The group was also shocked to learn that Punjab is recognized as “the cancer capital of India.” There are at least 90 cancer patients for every 100,000 people in Punjab.¹

This case study from Punjab is important as one considers the impact of our environment on human life. The physical, chemical and biotic factors that surround us, such as air, temperature, sun, soil and water—as well as the flora and fauna—compose our environment. Health requires a sustaining and supportive environment, and many of our practices undermine this support and sustainability. Pollution of water and air, destruction of natural habitats, and massive industrialization threaten the continuation of life as we know it; therefore, environmental awareness is important to the maintenance of health.

Fifty years ago, lead poisoning was relatively common. Physicians were taught to recognize discoloration of gums, bluish stippling in blood cells, and the sight of neurotoxic damage caused by lead. Lead was added to paint to give it luster and strength, but children would pick at flaking paint, eat the flakes, and become poisoned by the lead content.



Overpopulation

An Environmental Concern?

A little pollution here, destruction of a few trees there, the dumping of some raw sewage into a river somewhere—all these may seem of small impact. When such isolated acts are multiplied by the millions, however, they begin to have a major destructive effect. It's for this reason that many people are beginning to voice what has sometimes been labeled a "politically incorrect" viewpoint: that overpopulation is the worst environmental threat we are faced with today.

Overpopulation often damages a nation's economy. When a country is unable to feed its population, it consequently has to purchase and import food. People take up space needed for farms and forests; their waste pollutes the water, land and air. Destruction of forests results in loss of animal habitats as well as loss of plant species and their capacity to remove carbon dioxide and produce oxygen. Overpopulation presents serious difficulties to effective governance; consequently, strife and turmoil often ensue.



environment

great soul

SUSTAINABLE AGRICULTURE

Closely related to overpopulation is the issue of sustainable agriculture.

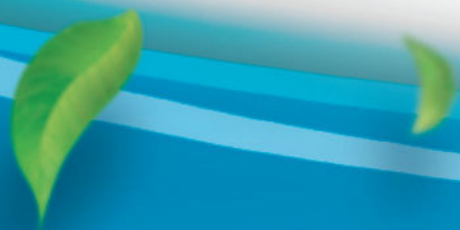
Improvements in agricultural technology have led to enormous increases in yields of produce per acre of land utilized. Such improvements, however, do not come without an environmental cost. Further changes in agricultural priorities are needed to balance the utilization of land.

DEFORESTATION

Deforestation on a massive scale often results in damage to the quality of the land. Although some 30% of the earth's surface is still covered by forest, large tracts of land are lost annually to deforestation. The balance between our need for forests and our need for food relates to the pressures of overpopulation. Deforestation contributes to climate change. Moist forest soils quickly dry out without the shade of a forest canopy. Forest lands can quickly become deserts. The role played by forests in absorbing greenhouse gases is a central one.⁸

FOOD DISTRIBUTION

The uneven development of the world means that although current food production is sufficient for the global population, food is not freely available to all. Poverty and the impact of climate change are felt much more acutely where drought and desertification are taking place. Many undeveloped countries have an inadequate infrastructure to support the proper distribution of food.



POLLUTION

Two areas of pollution that are particularly concerning are water and air pollution. Industrialization has produced massive amounts of collateral waste material. The seriousness of environment contamination by pollutants varies with the elements involved. Plastics are derivatives of petroleum-type products, and while extremely useful, they do not naturally degrade easily. It's been shown that plastic can persist for multiple decades.

Even when mixed with cellulose to produce so-called "biodegradable plastic," the actual plastic particles last much longer than the cellulose, which degrades. The remaining plastic particles, if small enough, may be subject to bacterial degradation. In practice, such degradation does not always occur as predicted. The state of California sued a plastic bottle maker—ENSO Plastics, Aquamantra and Balance Water—for false claims.² Sun, wind, and wave action merely fragment plastic, but eventually most of it finds its way into the ocean. Scientists have discovered plastic particulate matter at depths of 15 to 30 feet in the Pacific Ocean.

These particles, called "nurdles," have been found in the digestive tracts of krill, which are the basic food source for most marine life. Our addiction to disposable plastic water bottles may pose a huge threat to the planet.³ Industrial waste—which includes heavy metals such as lead, mercury, and cadmium, as well as toxic dioxin compounds—can be particularly dangerous and is contaminating the groundwater. The radioactive contamination following the 2011 earthquake and massive tsunami off the coast of Japan will likely render the Fukushima area uninhabitable for decades, if not centuries. The Chernobyl disaster in Ukraine in 1986 resulted in increases in thyroid and other cancers. Radioactive isotopes that leach into the water are a form of silent yet lethal pollution.



CLIMATE CHANGE

Most scientists agree that there have been significant warming changes during the last 100 years though opinions differ as to why.

Climate change may influence food production. Yields of grain have been shown in many situations to vary with temperatures. For example, the International Rice Research Institute in the Philippines⁹ found that rice production declined by 10% for each 1-degree-Celsius increase in growing season nighttime minimum temperature.



global warming

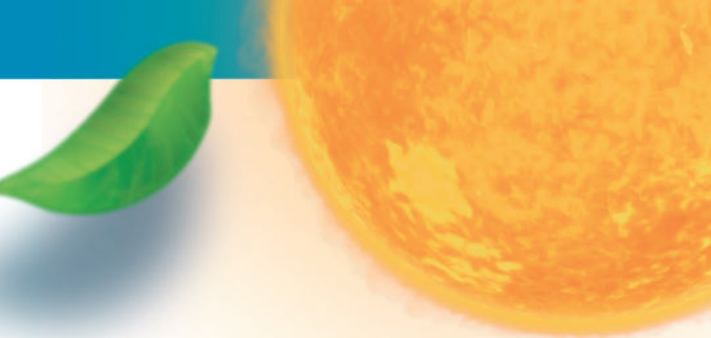
DOMESTIC AND AGRICULTURAL WASTE

Outbreaks of disease are frequently related to viral and bacterial contamination by human and animal waste. Hygiene is a fundamental health principle.

The Blacksmith Institute's Technical Advisory Board⁴ reports that persons living in polluted regions may not have immediate health problems but may later develop cancers, lung infections and intellectual disabilities.

There are towns in various parts of the world where life expectancy has decreased to lows not seen since the Middle Ages and where birth defects are the norm rather than the exception. In other places, children's asthma rates have been measured above 90%. In these regions, life expectancy may be half that of the richest nations.⁵ In India 77% of the population is exposed to air pollution that exceeds the recommended limit for humans.⁶





SOLAR IRRADIATION

The sun is central to the provision of energy to our planet. Much of its radiation is important to well-being but overexposure to ultraviolet radiation can be harmful. Such radiation may become stronger should the ozone layers of the upper atmosphere be depleted.

Vitamin D is probably an important factor in controlling the growth of other cancers, such as prostate cancer. Sunlight exposure, therefore, in an appropriate amount, is essential to health.⁷ It kills many bacteria, and it's a healthful practice to let the sunlight stream into our homes.

INTERNAL ENVIRONMENT

Just as important as our external environment is our internal environment, where our metabolic processes take place. Our bodies maintain a precise balance—or equilibrium—through the processes of homeostasis. We best support homeostasis by a life that includes daily physical activity and a healthful diet rich in unrefined plant foods.

We must be extremely careful not to introduce toxins into our bodies' internal environment. Tobacco smoke, with its hundreds of chemicals, is a prime example. Alcohol also is a potent toxin. The use of psychotropic drugs (medications that affect the central nervous system and can cause changes in behavior or perception) as "recreational" substances pollutes our internal environment as well.



LIFE APPLICATION QUESTIONS:

Take the time to consider these questions and apply what you are learning in your life.

1

Even though I sometimes feel as though one person cannot do much to stop deforestation and industrial pollution, besides financially supporting some environmental groups, what choices can I make, such as the ways I use energy and plastics, that will contribute in some way to protecting the environment?

2

Shawn has a “green” friend who is highly vocal about environmental issues, but she’s skeptical of Shawn’s choice to be a vegetarian. Which advantages of a vegetarian diet could Shawn point out that would meet with her friend’s approval as an environmentalist?

3

Education can often lead to more informed choices about family size, population growth and better quality of life and health for all. What can I do to support the efforts of groups that run educational institutions and programs in countries where poverty drastically reduces the quality of life for many families?

4

Have I experienced any of Seasonal Affective Disorder (SAD) symptoms, such as depression and irritability in the winter months or when spending time indoors? How can I change my program in order to spend a carefully regulated amount of time in the sunshine? Are there children in my community or family who need encouragement to spend time outdoors or who need caution to limit their exposure to too much solar irradiation?



5

Which pollutants is my body being exposed to? Which of these can I limit or eliminate altogether? Are some of my choices exposing me to chemicals or substances that might give me passing gratification but have harmful effects in the long-term?

6

How am I contributing emotionally and spiritually to the following environments: home, work, school, church, community? What type of contribution am I making? Is it causing pollution or peace, strife or sanctuary? What choices can I make, and where can I receive the help I need, to stick to my decision to improve and protect my environment?




HOME ENVIRONMENT

Health, God's gift to us, is best maintained in the most natural state of unpolluted and hygienic purity. We are stewards of the earth, responsible for managing the earth's resources and the environment of our bodies. Because we are more than mere physical beings and possess intellectual, emotional and spiritual dimensions, we also need to consider the emotional and spiritual environments in which we live. Too many homes are places of tension and distrust. Anger and violence in the home will take an enormous toll on the health of everyone involved.

Domestic violence affects many of our homes; verbal abuse is also common. Our homes should provide an oasis of security in a world of turmoil. Kind and supportive attitudes will nurture the emotional health of the family.

The spiritual environment of the home affects the environment of our minds. Our homes should be calm, comforting and supportive places. Values are taught and come from a basis of belief and trust. We place our trust in a loving God. We are secure in His care and teach our children to seek this spiritual relationship with Him. We urge them to be loving and nonjudgmental of others. God admonishes us to love our enemies and to do good to those who mistreat us.¹⁰

If we live in an atmosphere of tolerance and peace, our spiritual environment will also be conducive to health. We will, as it were, drink from a fountain of life. The atmosphere of heaven will comfort our souls. We will be secure as we ground ourselves in the certainty of God's love.



1 "Punjab's Cancer Cases Exceed National Average," Times of India, January 29, 2013, accessed January 11, 2021, <https://timesofindia.indiatimes.com/city/chandigarh/Punjab-s-cancer-cases-exceed-national-average/articleshow/18232958.cms>
2 S. Peng, et al., "Rice Yields Decline with Higher Night Temperature from Global Warming," Proceedings of the National Academy of Sciences of the United States of America 101, no. 27 (July 6, 2004), 101. 3 Henry Leinewer, "California Sues Biodegradable Plastic Firms," Resource Recycling, October 26, 2011, accessed May 3, 2012, <http://resource-recycling.com/node/2204>. 4 Blacksmith Institute Technical Advisory Board, (27):9971-5, E-pub, June 28, 2004. 5 American Lung Association, State of the Air (Washington, DC: American Lung Association, 2011). 6 India State-Level Disease Burden Initiative Air Pollution Collaborators, "The Impact of Air Pollution on Deaths, Disease Burden, and Life Expectancy across the States of India: The Global Burden of Disease Study 2017," The Lancet Planetary Health 3, no. 1 (December 5, 2018), E26-E39, accessed January 15, 2021, [https://doi.org/10.1016/S2542-5196\(18\)30261-4](https://doi.org/10.1016/S2542-5196(18)30261-4). 7 E. Braunwald et al., eds. Harrison's Principles of Internal Medicine (New York: McGraw Hill, 2011). 8 World Resources Institute, accessed April 20, 2012, <http://earth-trends.wri.org>. 9 "Deforestation—Modern-day Plague," National Geographic, accessed April 4, 2012, <http://environment.nationalgeographic.com/environment/global-warming/deforestation-overview/>. 10 Matthew 5:44; Luke 6:28. 11 <https://unsplash.com>



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