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WORLD ECOLOGICAL PROBLEMS AND THE WAYS OF THEIR SOLVING

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У статті розглянуто світові екологічні проблеми та їх наслідки,що загрожують існуванню на планеті Земля; обговорюються та пропонуються можливі шляхи щодо їх вирішення.

World-scale ecological problems endangering the very life on the Earth, their after-effects are being considered in the article as well as the ways of their solving are being discussed and proposed.

Problem setting. Our environment is constantly changing. There is no denying that. However, as our environment changes, so does the need to become increasingly aware of the problems that surround it. With a massive influx of natural disasters, warming and cooling periods, different types of weather patterns and much more, people need to be aware of what types of environmental problems our planet is facing. Our planet is poised at the brink of a severe environmental crisis. Current environmental problems make us vulnerable to disasters and tragedies, now and in the future. We are in a state of planetary emergency, with environmental problems piling up high around us. Unless we address the various issues prudently and seriously we are surely doomed for disaster. Current environmental problems need to be focused on [1].

The purpose of the article is to consider major environmental problems and the ways of their solving.

Basic materials. These six megatrends present major global threats for planet Earth - problems that must be solved if the world is to remain a supportive habitat for humans and other species. We looks at causes and possible solutions.

1. Air pollution and climate change.

Problem: Overloading of the atmosphere and of ocean waters with carbon. Atmospheric CO_2 absorbs and re-emits infrared-wavelength radiation, leading to warmer air, soils, and ocean surface waters – without it the planet would be frozen solid. Unfortunately, there's now too much carbon in the air. Burning of fossil fuels, deforestation for agriculture, and industrial activities have pushed up atmospheric CO_2 concentrations from 280 parts per million (ppm) 200 years ago, to about 400 ppm today. That's an unprecedented rise both in size and speed.

The result: climate disruption.

But carbon overloading is only one form of air pollution, caused by burning coal, oil, gas and wood. The World Health Organization recently estimated that one in nine deaths in 2012 were attributable to diseases caused by carcinogens and other poisons in polluted air.

Solutions: Replacing fossil fuels with renewable energy. Reforestation. Reducing emissions from agriculture. Changing industrial processes.

The good news is that clean energy is abundant - it just needs to be harvested. Many experts consider, that 100 percent renewable-energy infuture is feasible with existing technology nowadays.

But the bad news is that even though renewable energy infrastructure - solar panels, wind turbines, energy storage and distribution systems - are already widespread, and getting cheaper and more efficient all the time, experts infer, that we're not applying them quickly enough to prevent catastrophic climate disruption. Barriers in policy and finance still remain to be overcome.

2. Deforestation: Our forests are natural sinks of carbon dioxide and produce fresh oxygen as well as helps in regulating temperature and rainfall. At present forests cover 30% of the land but every year tree cover is lost its amounting in the country of Panama due to growing population demand for more food, shelter and cloth. Deforestation simply means clearing of green cover and making the land available for residential, industrial or commercial purposes [2].

Solutions: Conserving of what's left of natural forests, and restoring degraded areas by replanting with native tree species. This requires strict governance - but many tropical countries are still developing, with increasing populations, uneven rule-of-law, and widespread cronyism and bribery when it comes to allocating land use.

3. Soil degradation.

Problem: Overgrazing, monoculture planting, erosion, soil compaction, overexposure to pollutants, land-use conversion - there's a long list of ways that soils are being damaged. About 12 million hectares of farmland a year get seriously degraded according to UN estimates.

Solutions: A wide range of soil conservation and existing restoration techniques should be applied; from no-till agriculture, crop rotation to water-retention through terrace-building. Food security under consideration depends on keeping soils in good condition, we're likely master this challenge in the long run. The question whether this will be done in a way equitable to all people around the globe, still remains.

4. Overpopulation.

Problem: Human population continues to grow rapidly worldwide. Humanity entered the 20th century with 1.6 billion people; right now, we make up about 7.5 billion. Estimates put us at nearly 10 billion by 2050. Growing global populations, combined with growing affluence, is putting ever greater pressure on essential natural resources like water. Most of the growth is at the expense of African continent, Southern and Eastern Asia.

Solutions: Experience has shown that when women are empowered to control their own reproduction, and gain access to education and basic social services, the average number of births per woman drops precipitously.

Being conducted properly, networked aid systems could bring women out of extreme poverty, even in countries where state-level governance remains abysmal.

5. Public Health Issues: The current environmental problems pose a lot of risk to health of humans and animals. Dirty water is the biggest health risk of the world and poses threat to the quality of life and public health. Run-off to rivers carries along toxins and chemicals as well disease carrying organisms. Pollutants cause respiratory disease like Asthma and cardiac-vascular problems. High temperatures encourage the spread of infectious diseases like Dengue.

6. Genetic Engineering: genetic modification of food using biotechnology is called genetic engineering. Genetic modification of food results in increased toxins and diseases as genes from an allergic plant can transfer to target plant. Genetically modified crops can cause serious environmental problems as an engineered gene may prove toxic to wildlife. Another drawback is that increased use of toxins to make insect resistant plant can cause resultant organisms to become resistant to antibiotics [3].

Conclusion. The need for change in our daily lives and the movements of our government is growing. Due to many different factors coming into play- voting, governmental issues, the desire to stick to routine many people don't consider, that what they do will affect future generations. If humans continue moving forward in such a harmful way towards the future, then there will be no future to consider. Although it's true that we cannot physically stop our ozone layer from thinning (and scientists are still having trouble figuring out what exactly is causing it) there are still so many things we can do to try and put a dent in what we already know. By raising awareness in your local community and within your families on these issues you can help contribute to a more environmentally conscious and friendly place for you to live in.

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