

MATE 🖁 🗑 Z The CONTENTS eco ENVIRONMEN PEOPLE SCENCE NATURA GLOBAL Ecology. Environmental issues: ATER URE warming the ozone hole ENVIRONMEN<sup>®</sup> water resources destruction and SCIENCE FLORA deforestation PEACE NSECT WATER desertification



Ecology – a word composed of two Greek words: "oikos" – house, home, and "logos" – value.

It is believed that ecology is primarily a biological science, but it is not only nature, but also the environment, by which man lives in nature.

Ecology considers the problem of the relationship between man and environment.

Everything is connected - reads the first environmental law. Hence, a step can not step without touching, and at times, not breaking anything from the environment. Every step of man on regular lawn is ruined dozens of microorganisms, scared by insects, altering migratory routes, and may be reducing their natural productivity. Before the advent of man and his active attitude towards the nature in the living world is dominated by a mutual harmonious relationship and connectedness, we can say that there were ecological harmony

Environmental problems, which are expressed in violation of the balance of conditions and influences in the ecological environment of the person arose as a result of the exploitative relationship of man to nature, the rapid growth of technology, the scale of industrialization and population growth. Development of natural resources is so great that the question arose about using them in the future. Pollution of the natural environment is reflected in the increasing smog, dead lakes, the water we can't drink, deadly radiation and the extinction of species. Human impact on terrestrial ecosystems, which in their totality, the relationship and interdependence form the ecosystem of Earth, causes changes in a complex system of the human environment. A negative consequence of this impact is expressed as the risk of environmental conditions holistic human existence, the threat to health through air, water and food that are contaminated with substances produced by a human.

Disturbances of the natural environment depends on the number and concentration of population and production and consumption. In modern society, all these factors acted in such a way that the environment was heavily contaminated.

People in the last century has made too great an increase in the production and dissemination of wastes, by-products and chemicals. Pollution is very harmful to life on our planet, of humanity itself. We pollute the air and water, live in a noise and dust that no living creature will not be tolerated.

### ENVIRONMENTAL PROBLEMS

LOCAL

REGIONAL

**GLOBAL** 

These problems require for their solution different solutions and different character of scientific development

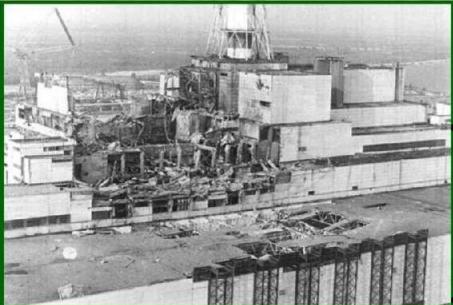
An example of a **local** environmental problem - plant discharging without treatment into the river their promstoki harmful to people's health. This is a violation of the law.

The environmental authorities or even the public should through the court to fine such plant and under the threat of closure to force him to build treatment facilities. Much of science is not required



Примером **региональных** экологических проблем может служить Кузбасс, почти замкнутая в горах котловина, заполненная газами коксовых печей и дымами металлургического гиганта, об улавливании которых при строительстве - никто не думал.

Или высокая радиоактивность почв в районах, прилегающих к Чернобылю.





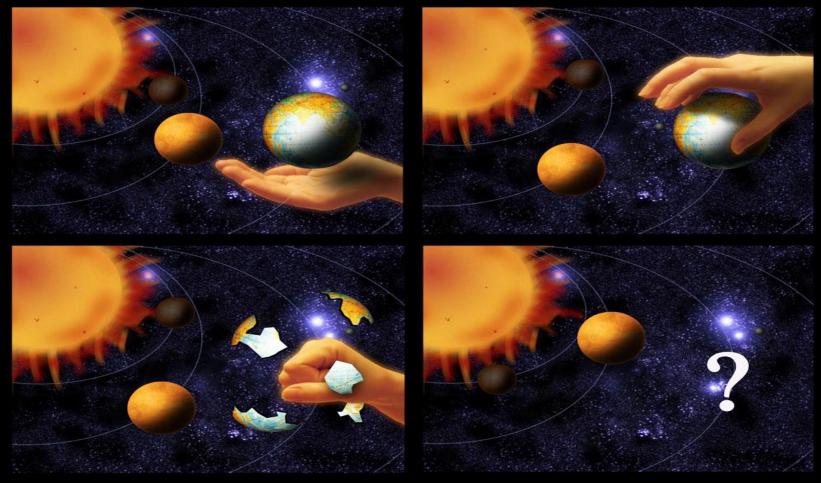


Для решения таких проблем уже нужны научные исследования. В первом случае разработка рациональных методов поглощения дымовых и газовых аэрозолей, во втором - выяснение влияния на здоровье населения длительного воздействия слабых доз радиации и разработка методов лезактивации почв

4-й реактор ЧАЭС после аварии писlearwar.ru Дезактивации почв.

Still in an infinite Universe in an orbit around the Sun rotates non-stop a small planet Earth, each new round of proving the inviolability of its existence. The face of the planet continually reflect satellites, the sending to Earth of space information. But the face of this irreversible change. Anthropogenic impact on nature has reached such proportions that problems of a global nature.

#### Всё в твоих руках...



Began in the second half of the 20th century warming is a true fact. We feel softer than before, winters. The average temperature of surface layer air, compared with the 1956-1957 years, when was held the First international geophysical year, increased 0.7'

What is the reason of this phenomenon? Some scientists believe that it is the burning of hu fossil fuels and release into the atmosphere large bon dioxide which is a gre t is difficult to return heat from surface.Forecast for the futu 2050) suggests a possible temper rise of 1.5 to 4.5 C. the cond arrived at by the international conference of climate scientists in **Austria** 





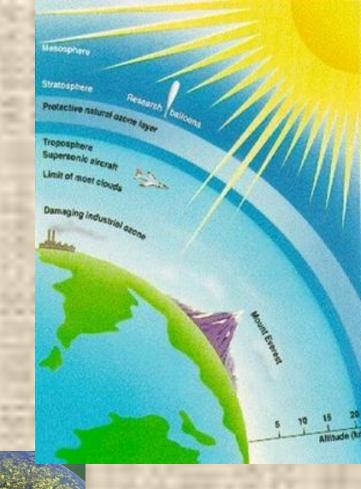
### THE OZONE HOLE



No less complex in the scientific sense of the environmental problem of the ozone layer. As we know, life appeared on Earth only after he has formed the security to the ozone layer, to cover her from the violent ultraviolet radiation. For many centuries there were no signs of trouble. The problem of the ozone layer arose in 1982, when the probe launched from a British station in Antarctica, at a height of 25 -30[3] miles found a sharp decline in the ozone content. Since then, over Antarctica all the time is logged the ozone "hole" of varying shapes and sizes. According to the latest data, it is equal to 23 million square kilometers, that is, the area equal to the whole of North America.

"It is quite possible that by 2100 the protective ozone blanket will disappear, ultraviolet rays sear the Earth, animals and plants will die. People will seek refuge under the giant domes of artificial glass, and eat food of the astronauts". According to experts, the changing climate will affect flora and fauna





# Water man pollutes from time immemorial. For many thousands of vears all become accustomed to water

WATER

The deficit is getting clean water and water scarcity can have an impact faster than the consequences of the "greenhouse effect": 1.2 billion people live without clean drinking water, 2.3 billion without wastewater treatment facilities for the contaminated water.Water may become the subject of internecine conflict, as 200 of world's largest rivers flow through the territory of two or more countries. Water Niger for example, use the 10 countries of the Nile – 9, and Amazon – 7 countries.



### Destruction and deforestation

Especially great environmental threat is the depletion of forests – the "lungs of the planet" and the main source of the planet's biodiversity. There are cut down or burned every year about 200 thousand square kilometers, and then disappears 100 thousand (!) species of plants and animals.





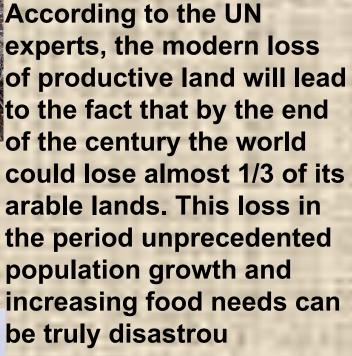
## Desertification

Under the influence of living organisms, water and air on the surface layers of the lithosphere gradually form an important ecosystem, thin and fragile - soil, which is called "skin of the Earth." It the Keeper of fertility and life. A handful of good soil contains millions of microorganisms that support fertility. To form a soil layer thickness of 1 centimeter requires a century



According to geologists, before people began to engage in agricultural activities, livestock grazing and open land, the river annually was drifting in the oceans of around 9 billion tons of soil. Now this number is estimated at about 25 billion tons.Soil erosion - a purely local phenomenon - now acquired a universal character. In the US, for example, about 44 % of arable land affected by erosion. Russia has gone a unique rich black soil with humus content(organic matter determines soil fertility) at 14 -16 %, which was called the citadel of Russian agriculture. In Russia, the area of the most fertile land with a humus content of 10 – 13 % decreased by almost 5 times. A particularly difficult situation occurs when not demolished only the soil layer, but the parent breed which it develops. Then comes the threshold of irreversible destruction occurs anthropogenic (i.e. created by man) desert.









AP / Daniel A. Anderson

Environmental pollution, depletion of natural resources and disruption of ecological relationships in ecosystems became global problems. And if humanity is to continue on the current path of development, his death, as a leading ecologists in the world, after two or three generations is inevitable.

