

Climate, Crop and Livestock

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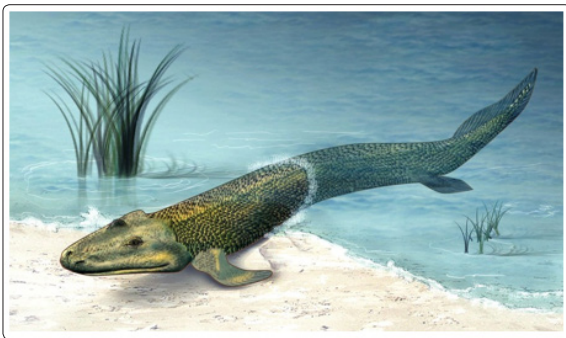
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The beginning of life on Earth originated 600 million years ago. Various creatures creep out of the ocean and fill the land.



Each of them consumes air and water, saturated with minerals, and exhales carbon dioxide and moisture with their waste. Plants, transforming this waste, complement the construction of the water cycle and climate and saturate the atmosphere with oxygen and a kind of moisture. Breathing moisture and evaporation from plants create clouds of a special substance in the atmosphere, which differ from evaporation from water surfaces and are characteristic for each area.

These are organic fumes and they are the main raw material in the process of precipitation production, their distribution and their volumes. The value of volumes is confirmed by the following information: [1]. It is known what kind of "... work is done by plants, the leaves of which through the stomata intensively evaporate the moisture that comes from the soil along the roots. This type of evaporation is called transpiration. The leaf surface of plants is enormous. The area of all leaves is 3-4 times larger than the area of the entire land, that is, in size it is not less than the area of the World Ocean". To this is added the moisture of respiration and excretion of the animal world and the subsoil population. The biota (the collection of all organisms) on land provides more intense evaporation than the ocean and, most likely, affects the global circulation more than the ocean.

The water cycle consists of three components - the quality of the vapor, the volume of the vapor and the rate of the vapor. Waste of secretions and transpiration, each molecule of which is different from all its neighbors and from the ordinary water molecule, constitutes the main part in the composition of the vapors that form clouds. This substance takes a leading role in the mechanism of precipitation, which controls the distribution and frequency of precipitation, which formed a strict and regular portioned water supply to the entire land area. The idea is confirmed by the fact that over millions of years, clearly limited and diverse habitats of flora and fauna - tropics, steppes, deserts - have formed.

By his appearance, man began to destroy the balance of the water cycle - he took more than half of the fertile land from nature - for arable land, dumps, dumps, reservoirs, deforestation, the construction of cities and roads, etc. It is estimated that out of 149,000,000 km² (149 million square kilometers) of all inhabited land - 63% - [2], destroyed by civilization. "The data obtained made it possible to build a map of territories with disturbed natural ecosystems. It turned out that if you do not take into account areas of land covered with ice (Antarctica, Greenland, etc.), and bare rocks, then 63% of the Earth's land surface is destroyed natural ecosystems, and 2/3 of them were destroyed in the XX century. ... Forest ecosystems were destroyed in the first place. The destruction of tropical forests, in particular of such a large massif as the forests in the Amazon basin, is proceeding at an especially rapid pace. And although in many countries there is legislation on the protection of forests, in reality, out of 10 hectares of deforested forests in the world, only 1 hectare is being restored.

Territories on land with fully or partially destroyed natural ecosystems can be observed everywhere, but there are several large areas where they are destroyed over huge areas. These are, first of all, the centers of ancient agriculture.

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Almost all of Europe, with the exception of the northern part of Russia, is a continuous array of destroyed ecosystems.”

The simplest thought experience can replace laborious scientific research and show the reality of the proposed idea. If, on a nice summer sunny day, you pour a bucket of water onto the asphalt, it will evaporate in an hour, two, or even 3. The quality of the fumes from the asphalt will be the same - just H₂O. A bucket of water poured onto the soil will return to the atmosphere from several days to several months, while it passes through the food and plant chains of underground and terrestrial living creatures and plant roots and is released by waste and respiration after numerous physiological and chemical reactions and plant transpiration. It is known that each hectare of soil contains 20 tons of underground living creatures, each unit of which participates in a single technological process of transformations - [3]. On degraded land, sediments do not find their consumers and evaporate without changes. This is evaporation, which was not in nature itself, just as there was no asphalt, landfills, arable land, additional man-made reservoirs. All these are artificial fumes. The natural function of water disappears - the most important link in natural transformation. Water, precipitating, immediately returns back from the arable land and asphalt, from active evaporators of many technological operations, steam turbines, drying floors, dishes, linen without performing natural functions. The volumes and rate of such vapors are many times higher than the volumes and rates of natural vapors. The quality, volume and speed of water returning to the clouds have changed.

Feedback collapsed - regulation of water in clouds. Artificial evaporation is little dependent on solar heating. A person turns water into steam regardless of the weather, season, time of day.

A new mechanism of sedimentation has appeared in nature. Huge volumes of new vapors have no objectives and no purpose of their existence. Therefore, it rains with floods in some places, does not reach others - there is drought and fires, glaciers do not receive their usual supply and are shrinking. Nature cannot provide these masses of water with useful work - 63% of the land has disappeared and with it 63% of the biota. Driving water onto the asphalt, car washes and cooling towers is useless work or idle work, into emptiness. And nature abhors emptiness. Water began to defend its status - to warn humanity with floods, fires and the prospect of the destruction of all life on Earth.

Humanity has determined that climate change is the work of its hands, but did not notice the main thing - the merciless exploitation of water and its role in ensuring the climate.

It should be noted that all his actions lead to a reduction in artificial evaporation:

- Struggle to reduce CO₂ emissions,
- Development of “green” technologies “,
- Creation of alternative energy,
- Reuse of water,
- Reclamation of dumps and deserts,
- Restoration of forest cover

But all these are all private, scattered amateur and microscopic measures. Social events. It is necessary to develop them into a state, more precisely, an international strategic, universal, obligatory, effective direction by every country, every person. It is necessary to develop a global concept, rethink the entire population of the Earth, the essence of the destruction of the water cycle. To preserve life on the planet, it is necessary to begin the restoration of natural evaporation right now, as the main link in the water circuit. The nearest measures to be added to the listed actions:

- Immediately stop all projects and construction of hydroelectric power plants with water accumulation in reservoirs, all work on turning rivers and laying canals. To begin a gradual and unconditional replacement of hydroelectric power plants with damless and alternative energy and drainage of all artificial water areas.
- Deepening river beds to prevent floods.
- Reducing washes of everything that is washed and dried. Known dry cleaning of cars, washing the surface of roads, it is necessary to develop new methods of dry cleaning of all objects, such technologies are known.
- Reuse and recycling of water, the reuse of wastewater in aircraft lavatories has been well developed.
- Collection and use of rainwater from hard floors.
- Underground and underwater construction. Development of ores, beneficiation, smelting, obtaining a finished product - all this can be done underground, in mined-out spaces. All types of production must be located underground. Up to housing. There are many retail and metro areas in many major cities. There are real projects of underwater and underground cities. So Japan is already building an underwater city. There are underground greenhouses where all kinds of greens are grown all year round.
- Outdoor landscaping of buildings and structures. There are experiences of growing fruits and vegetables on roofs and walls.
- Drip irrigation, organic farming - alternatives to traditional crop production.
- From the standpoint of returning to nature its most essential part, it is important to grow crops, under which 10% of all land was plowed up. Looking at the condition of the cultivated soil for many years, it can be seen that organic matter and the entire subsoil population have disappeared. The fields are fertilized with the substances required for a particular monoculture. A change in crop rotation slightly increases the duration of the natural soil, but not for long. The arable soil turns into an environment with artificial non-natural minerals.
- The same can be done in urban environments on walls, roofs and other hard surfaces [4].



Perhaps they will be enough to provide the owners of roofs and walls with plant products. This requires scientific justification and the state level of revision of the production of all types of products. Or, at least, so that states do not interfere with the initiatives of specialists. When designing the architecture of new houses and buildings, you can not only create green outer walls and roofs, but also make them in the form of structures for hydro and aquaponics. Aquaponics is a symbiosis of plants and fish that feed on each other's waste. This principle can be used for many other communities, for example, cage keeping of small animals and birds, for example, with rabbits, nutria, quails, chickens. On the northern sides, you can get a great deal of mushroom cultivation. It is necessary to radically reconsider your attitude to each type of field product.

Very large areas are used for animal feed. Suffice it to recall that herds of cattle and small ruminants existed in Kazakhstan without hay harvesting, silos, farms - exclusively with nomadic cattle breeding.

Turning to historical materials, you can find that: [5]

The highest rise was reached in the 80s of the 18th century - the number of sheep in Kazakhstan was brought to 41 million heads. [6]:

In 1913, the number of sheep and goats was almost 20 million heads, [6]

As of January 1, 2019, according to the Statistics Committee of the Republic of Kazakhstan, 18677.9 thousand heads of sheep and goats were recorded in Kazakhstan.

It turns out that before the Russian expansion, in Kazakhstan, when there were no tractors, arable land, and stables, the livestock population was greater than now, in the 2020s.

In Mongolia, nomadic cattle breeding is developed - [8]: The total number of small ruminants in Mongolia reaches 84 million, while in Kazakhstan, with a territory exceeding 2 times, only 19 million.

According to history textbooks: [9] it is known that "Nomadic pastoralism is a special type of productive economy, in which the predominant occupation is mobile pastoralism, and most of the population is involved in periodic migrations" And regular migrations do not allow trampling pastures in the same places.

Modern livestock raising has become too labor intensive, complex and inefficient. Why prepare food when animals can eat them on the vine. Millions of herds of zebras, antelopes, and buffaloes graze in Africa without human help. Such methods are known and continue - this is camel breeding in Kazakhstan, yak breeding in Kyrgyzstan, Mongolia, Tuva. Perhaps it would be more rational to go back to nomadic pastoralism? Using the experience of still living old people, modern technology - snowmobiles, vehicles, drones - this method can be improved. Then there will be no need to plow land for fodder crops, storage and feeding. In addition,

manure will not need to be stored and scattered over the fields.

Rice cultivation occupies a huge area. However, hydroponic methods have been developed and are beginning to be applied: [10]. So you can grow rice for yourself on the roofs and walls of buildings. Organic farming. It has been proven that it is not necessary to dig up the soil in order to obtain good yields. The entire subsoil population is preserved, which passes through and transforms all incoming water and releases it in a different individual form and natural vapors return to the clouds.

Thus, it is possible to return to nature its natural inhabitants and natural vapors. A significant contribution will be made to climate preservation. The governments of many countries, the UN are discussing certain particular elements of climate change problems. They promise to reduce or reduce fuel combustion. And they themselves are building new hydroelectric power plants with flooding of huge areas, turning rivers, developing new ore deposits and filling new areas with dumps and dumps and building more and more cities and roads, expanding sown areas.

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