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the Ukrainian nation in the global crisis of civilization  
based on sustainable innovation and investment  
development

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**PRESERVING BIOLOGICAL LIFE OF THE UKRAINIAN NATION IN THE  
GLOBAL CRISIS OF CIVILIZATION BASED ON SUSTAINABLE INNOVATION  
AND INVESTMENT DEVELOPMENT**

*Summary*

The article substantiates the relevance of the innovation and investment activities of the state in the segment of the human food supply as the only possibility of preserving the biological life of the Ukrainian nation and its continued future sustainable development. It offers a comprehensive, innovative - investment concept of conservation and restoration of vital national resources of Ukraine as an important component of achieving the goal. This preference to new research results and data of long-term values, important discoveries, findings that refute existing theories and data that, according to the authors, are of practical importance.

*Keywords:* resource fertility; living matter; nation; growth pole of the nation; Evolution of intelligence; triune problem; complex concept.

*Problemformulation.*

Our post flood civilization is coming to its end. According to the authors of a series of articles that have appeared in print and in electronic networks (Klassen, Oreshkyna, Grinevich, Kandyba, Alekseeva, Demyna, Didenko, Muldasheva, Shemshuk, Shipova and

others) modern society is in crisis due to proximity and man-made natural disasters. One of the most important and obvious biological problems of human life - **the approaching end of the same nature and so forth is also a district's resources (soil fertility, drinking water, living environment)**, because Earth ecosystem possibilities are limited. Note - oil, gas, coal, uranium - resources only enhance the mechanical strength of man).

Thus there is a problem that concerns all people without exception: ordinary people and elites, NGOs, political parties and governments, nations and states. This is a real danger of self-destruction of civilization soon. In front of this problem all our differences completely lose all kinds of sense. The ideological, political, economic, status and property. It can not be put on any private level. For the solving of this solution must rise above their convictions. In addition, the problem is the "moment of truth" - a test of belonging to humanity.

There are only two options for the future, or humanity dies in planetary catastrophe or integrated to civilization level, and continues to exist in the form of space (ideal) civilization. [1]

The level and importance of natural resources viable confirmed a sufficient number of documents testify.

Back in 1992 from the UN representative conference materials (problems of environment and development) in Rio de Janeiro had concluded that the existing consumer market model of civilization through the thoughtless development and consumption of natural resources of the biosphere rapidly leads to death of all mankind. [2]

In 2003, the famous scientist Fridtjof Capra in his book "Web of Life" said, that in the late of twentieth century biological human life and the biosphere itself inflicted more and more losses, the dynamics of which may very soon become inevitable. At the same time, technological problems have created a crisis of civilization have solution, and some of them even quite simple. However, this requires a radical shift in our terms, 'brains, thinking and our system of values. But this does not happen and neither sense nor perception, nor in the minds of most political leaders. The need for recognition of the changing perception and thinking if we are to survive - yet neither comes to the corporate elite, not to administrators and professors at major universities. [3, p. 3]

Instead of having to consolidate intellectual efforts of peoples and nations to solve the problem "in human", for example, offered absurd and "inhuman" program reduce the consumption of food - a program of survival by some others. Senseless and "inhuman" because it not only continue agony, but only accelerate it. It is about a program called "golden billion". According to its creators, only the "best" people in the world and can feed our planet by his "exhausted" fertility resource. [4]

The report of Agricultural Organization (FAO) (2015) regarding the status of land resources in the world says that most of the world's soil resources are "not good, but only in good, poor or very poor condition." The report, in particular stating that the erosion destroys from 25 to 40 billion tons of topsoil annually, which reduces productivity and equally important, the ability of soil to store carbon, nutrients and water. A further loss of

productive soil can seriously hinder food production and food security, push millions of people into the abyss of hunger and poverty. [5] Again, the world goes "ghost." This time "ghost" world famine genocide.

Accordingly, a list of possible scenarios of "doomsday" that sweep "humanity from the face of the Earth," the leading scientists of the world (2013) supplemented with scenario entitled "Disruption of food supplies." It's almost "official" evidence that the self-destruction of mankind is not a threat, but a process.

As for the Ukrainian nation, according to many numerous irrefutable scientific and practical evidence on the road to self-destruction is in front "of the entire planet."

With the funds provided by the OSCE Project Coordinator in Ukraine and the US Agency for International Development (USAID) at the Institute of Agricultural Chemistry and Soil UAAS an analysis of environmental and toxicological state of arable lands in Ukraine suitability for cultivation of environmentally friendly products. It turned out that in 2007 Ukrainian land was "not good, but only in good, poor or very poor condition."



Figure. Ecological and toxicological status of arable lands Ukraine

Started by Dokuchaev VV monitoring losses of humus - soil fertility resources in the territory of Mykolayiv region, undoubtedly shows that for the period 1985-2002 years, the humus content drastically reduced and the critical limit (2%) could decline as early as 2025. [6, p. 97] Figure 2.

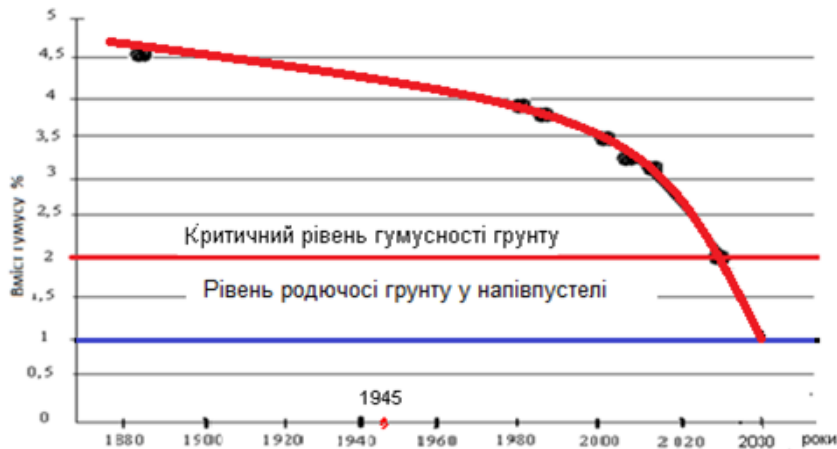


Figure 2. Dynamics of reduction humus content the territory of Mykolayiv oblast  
According to experts and scholars from AIC ground level below the critical humus content (2%) does not ensure agricultural productivity because land resource then becomes only operational space basis.

When writing articles we found the state statistics data on the loss of humus - soil fertility resource on all territory of Ukraine. The main wealth of the nation is not recorded and no system of basic macroeconomic indicators of the effectiveness of economic development of Ukraine. But with open sources of information we learned the following.

Table 1.

Humus content average and average physical quantity of humus in the soil of the land resources for agricultural purposes on the territory of Ukraine for the period 1880 -2016 years.

	Unit	V.V.Docutchaev Scientific works <b>1890 year</b>	National Agricultural University of Ukraine <b>1990 year</b>	Інституту охорони ґрунтів України <b>2016 year</b>
Average humus content	%	7,1	4,4	,1
Humus amount	Billion.t	8, 946	5, 540	3, 906

Table taken:

- Land Resources of Ukraine, as of 2016 is 42 million hectares.
- When the concentration of 30 tons of humus per hectare of land humus content soil is 1%.
- According to experts and scholars from APC ground level below the critical humus content (2%) does not ensure agricultural productivity.

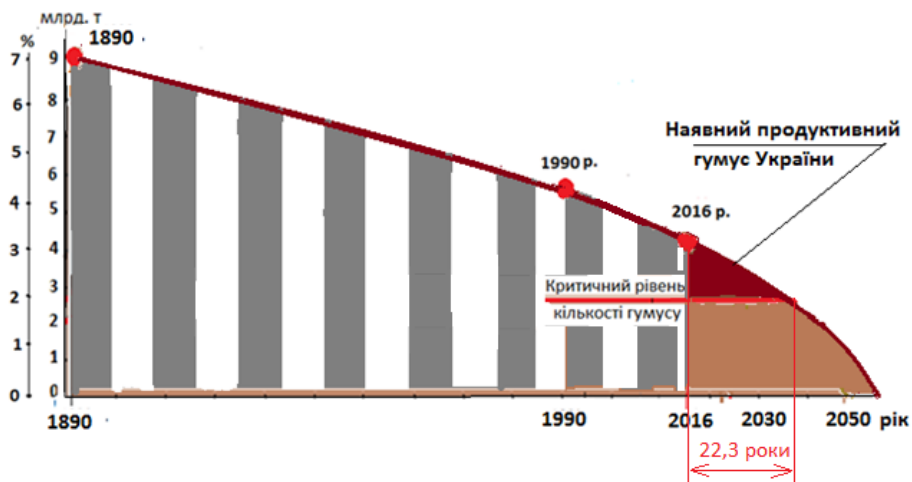


Fig. 3 United diagram of dynamics reduction humus content and physical quantity of humus in the soil of the land resources for agricultural purposes on the territory of Ukraine for the period 1880 -2016 years.

The diagram illustrates that over the last 126 years in Ukraine are catastrophic in scale of irreversible loss process of humus, which has steadily accelerated. Over 100 years of "tsar" rules and the Soviet Union on the territory of Ukraine lost 3.406 billion stons of humus from 8.946 billion available, or 31 m. tons / year. For 26 years of independence, Ukraine lost 1, 630 billion. tons of humus, or 62 mln. tons / year.

As of 2016 the Ukrainian nation has 3.906 billion. tons of humus, of which 2.520 billion. t. will be reduced unproductive in the middle humus content soil below 2%. Thus in Ukraine is now 1,386,000,000 t. of productive humus. With an annual loss of humus "achieved" in Ukraine destroy his pace to a critical level is reached after 22.3 years. Note that in the above chart does not include the impact of the reduction in fertility resource Ukraine phenomenon of desertification and aridization in the area of the Southern Steppe and in the Cherkassy, Poltava and other areas. It turns out that in the ignorance and stupid social activities previous states, in Ukraine, there were negative climate change, which in turn, as in 2012, caused a shift of the boundaries of climatic zones steppe 100-150 km north Ukraine. In the next 20 years could be lost is half the arable land in Ukraine, [7]

In 2011 B. Danylyshyn, former Minister of Economy of Ukraine struck annual losses resource fertility - humus first among high officials urged "to consider the preservation of Ukrainian lands major national idea of the XXI century". [8]

And at the very end. According to the definition of the World Bank and the OECD, natural capital (humus) is the natural heritage of the country and can be represented as the capital stock of the nation and the world.

Calculations of national "natural capital index", conducted by experts according to the method of its calculation in OECD countries also show the current catastrophic pace and volume depletion and loss of natural capital of Ukraine. [9, p. 193]

According to official estimates damage from land degradation - a shortfall of agroculture production, loss of soil quality parameters, the deterioration of the environment in Ukraine estimated value is equal to the gross of agricultural products. Agricultural entities do not meet the needs of the present generation of sufficient quality food creates a significant threat to the ability of future generations to meet their problems. [9, p. 268]

Compelling and clearly a problem exist. At the same time in Ukraine tragic loss of life and fertility of desertification land is not recognized in any level of the state and society. No corporate elite nor administrators and professors at major universities. Moreover the state is trying to profit from the sale of sovereignty over the territories of the still living nation together with the lands, that contain "remnants" of national fertility resource, genetic stock of the nation, a single source (alternatives there can be) human food supply.

We hear about the strategic development of Ukraine. The purpose of the nation development is defined as "welfare," but the problem of resource fertility, resource provisioning nation is not even mentioned. For example. Among the 10 priorities of the current "single comprehensive strategy to develop agriculture and rural areas of Ukraine for 2015-2020 years" loss of humus in agricultural lands and the need to protect the Ukrainian lands are not mentioned. There is the strategic development of Ukraine running downhill? Food security in a "strategy" is not associated with fertility, the quantity and quality of it, current and projected losses at all. [10] And the definition of "Resource fertility" in science and in practice AIC replaced by the definition of "land resources" which actually reflects only the spatial basis (in hectares) and does not reflect a quantity of fertile humus substances (in tons). A "Comprehensive strategy" that is not based on a resource that is not even recorded (and never accounted) - not the strategy of sustainable development. Laid a further imbalance between the satisfaction of current needs of the state and protection of interests of future generations. These losses humus reduce the number of nation successors. Broke down the link between, resource fertility as a "pole of growth of the Ukrainian nation" and a natural purpose of the nation. That is the purpose of the nation, but not a state.

Full-height standing problem of preserving biological life of the Ukrainian nation and conditions of existence for the next sustainable development. Negative processes of social life have arisen due to the outdated "unnatural" concepts of industrial and agricultural production, waste management concepts of production and consumption.

History knows tragedy extinction of certain civilizations, nations and ethnic groups due to loss of soil fertility. Most of the problems that occurred before they were not insurmountable. Complications were not seen on time - for cultural blindness, lack of scientific knowledge or through carelessness. Is there hope for us, Ukrainian nation? The answer is in the author [11] of sensational book "Collapse: How people choose to be or not to be" an American evolutionary biologist, physiologist and geographer, Pulitzer Prize winner Jared Diamond. "Many of my friends look with pessimism to the growth of the world population, reduce resources with increasing needs of mankind. But I hope in the idea that the main problems facing humanity, entirely created by mankind. Asteroid falling is not a core component of a "doomsday" list. To be saved, we do not need new technology,

we just need the political will to face problems. Another source of hope - a unique advantage that we have. Unlike earlier societies, ours first time has the ability to learn from mistakes peoples distant from us in time. When Maya and islanders from Mangareva cut down their forests, they had neither historians nor archaeologists, nor newspapers, nor television to warn them. We have a detailed chronicle of the successes and failures of mankind. Now the question we are going to use it or not. "

In fact, the Ukrainian nation has the latest scientific knowledge, new results of research, long-term practical matterdata, important discoveries, findings that refute existing theories and give reason to believe that indeed, environmental issues, creating a crisis of civilization must resolve that indeed some of them even rather simple. The implementation of solutions based on innovative investment of the state allow resources to stop the loss of fertility, to compensate their natural level, and even their increment. Given the fact that the triple problem of soil fertility, drinking water, living environment is caused by the loss of humus – resource of soil fertility, promote its recovery as natural water purification, healthier environment either.

*Allocation of Parts of common issues, that were not resolved before;*

If the alien of world that, who does not know what is in,  
No less alien, who does not know what is going in  
Marcus Aurelius

This ancient wisdom has a huge sense. Long way of modern model of civilization (dead end nature) to self-destruction takes place in the absence of knowledge about the world. In the absence of sufficient intelligence to this day, at first, did not manage to create a "theory of biological life on Earth", and secondly do not realize that the process of self-destruction exists and progresses, thirdly to realize the horror of death.

In order to understand what is happening with the Ukrainian nation, we must in the light of the latest achievements of science and practice harmonize professional language of specialists. As mentioned above milestone definition of "Resource of fertility", "The purpose of biological life," "Nation".

**Resource of fertility.** This concept in modern agribusiness is a "black box". Since the Old Testament believed that productive property - fertility has the earth by itself. So farmers believed for thousands of years. Only 140 years as VV Dokuchaev persuaded farmers in existence in the land of humus, which is peculiar property of productive fertility. The truth had already learned that the humus in turn contains "specific gel-like organic matter" incomprehensible composition and properties which are not identifiable or receive artificially.

In fact "specific organic substance ancient protoplasm cells, the only common base of thinking cells, living matter, living substance, material, energy and information of the cell biological basis of life. The carrier of the genetic code of all life on Earth is discovered in

1837, scientists of the Czech Republic Jan Purkinje. [12] Living matter, living substance, protoplasm cells, was created by nature as a resource for the existence of biological life on Earth. He has an earthly "manufacturing." [13] The protoplasm created during the first 3 billion years of geological history of Earth's ancient viruses, germs, bacteria, planted from cosmos cooled planet composed of oxygen, dead space matters (periodic table). In anaerobic conditions. Since the beginning of evolution (1 billion. Years ago) and the appearance of oxygen in Earth's atmosphere the process of creating ancient protoplasm stopped forever. "The only substance that never dies - protoplasm, filled the planet with their creations - plants, animals and people. Now humanity uses "remnants" of ancient protoplasm, after all the disasters and calamities, and life of previous civilizations. And in the body of each of us moves according to the genetic code and matrix ancient protoplasm, arheplazma (ie, the first cell that appeared in space), the output "growth pole" of all organic evolution. [14]

By the way at the time of writing this publication at the Institute of soil conservation of Ukraine "open" the presence of DNA in the "humus."

So it seems appropriate to consider the National resources of fertility - **humus**, which is located on the sovereign territory of land resources for agricultural purposes (in the segment of human existence), the physical quantity is determined in tons by known in agriculture methods.

**The purpose of biological life.** Without going into the question how, when and for what purpose the cosmic intelligence (God, the Creator, the World Mind) created life on Earth possible by logistics argue that biological life resource humus, pole of growth, it was created to achieve the goal undiscovered by humanity. No one denies that the micro cell - a work of intelligence. We can only assume that cosmic intelligence aimed to increase the volume of intelligence and its dissemination in the universe. This could be the purpose of creation and existence of man, HOMO SAPIENS, as holder of the brain, intelligence reproducer able to compose images and implement them into reality. This understanding of the purpose of nature is not contrary Matrix genetic code of nature.

**Nation.** The current definition of a nation of humanity that historically united stable community of language, territory, economic life and culture. But even in 1840 a prominent scientist Justus von Liebig wrote: "The cause of the appearance and disappearance of the nation is the fertility of the soil," support "of the causes of fertility (the nation's) life, wealth and power," theft "of soil fertility leads to its death." *k-a-t.ru > agro / 6-zakony / index.shtml* At the beginning of civilization, people settled along the rivers, not because of the views, but because of the presence there of water and "body" resource fertility, ancient protoplasm, humus, which is the next thousand years, becoming a "shared genetic material and the base, blood and flesh of nation, hold its territory. The territory as a spatial database. Thus was right when Humylov LA in the middle of the last century was approaching the understanding that the nation of humanity, a species - historically united at the biochemical



level resource soil fertility (ancient protoplasm, humus, resource fertility, genetic fund of the nation).

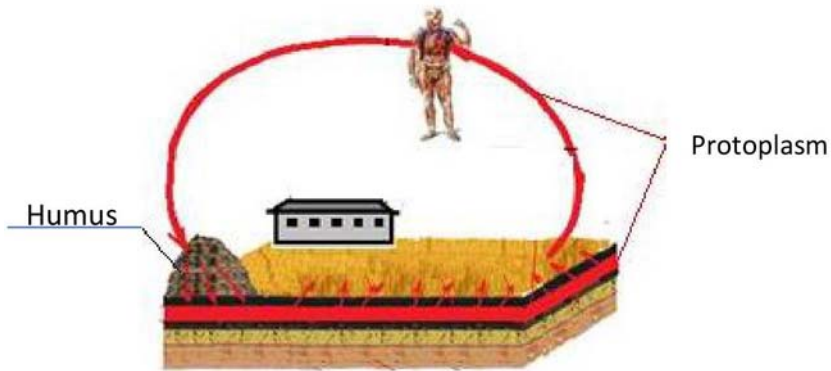


Figure 5 Unity areas - fertility resource - humus and the flesh and blood of the nation.

Among the numerous definitions, the definition of national idea: - "My nation should be and should always be successful, spiritual, intelligent" most natural, as corresponds to the purpose of nature, spelled out in the matrix of the genetic code of living life. [12] The practice criterion of truth. Life shows that our model of civilization does not meet his philosophical definition. As a social form of motion of living substance it does not provide stability and capacity for self-development rights "by exchanging self with the environment" as one that does not care about posterity. More correct to call it a model of society, but a model of civilization.

One more time. Theory and Practice of State agree that the ultimate goal of the society is "welfare" of human rights. Instead, the purpose of the nation, the goal of cosmic intelligence is human intelligence. Creating a Homo sapiens, creating billions of scientists developed the intellectual, spiritual people, collective intelligence of nature for the evolution of intelligence and its dissemination on Earth and possibly in the universe. And that is the main path to the natural goal - Homo sapiens had ensured resource ancient protoplasm cells humus, the only common ground thinking cells.



Figure 6 Mainstream of nature to the purpose of nature - Homo sapiens.

*Subject, purpose of research.*

On the planet Earth is a global resource reductions of fertility, the only source of food supply for biological life. Nation, ethnic groups condemned the "self-destruction" as a result of predatory, inappropriate "use" their life-giving resources. Already published script "end of world hunger." But the problem is threefold. In turn the scenario of "doomsday" from "thirst" and "doomsday" of proof to the living environment incompatible with life condition. After all, according to experts the effectiveness of man-made water treatment facilities and the living environment from man-made pollutants are only 7-11% and about 90% neutralized contaminants by humus as protection resource of the environment. Again, "our" humus, because the total area of Ukraine is 60 mln. ha, of which 40 mln. ha of agricultural land, in which exists humus. The increase of anthropogenic impact while reducing the total weight of humus led to the collapse of Environment during the lifetime of just one generation.

Regards the protection of water resources and the environment. In the current model of society not enough intelligence for responsible understanding the need for the establishment in the production and consumption of production processes with a complete technological cycle. Mostly desire to profit from the "production" excluding the cost of prevention "waste neutralizing". The current concept of treatment of waste production and consumption veiled permission. Concept created "a model" for profit but not for environmental protection. Using the model is not effective, because it eliminates the waste flow in living environment. For example, in the EU directives on this matter directly written purpose and principles of environmental policy in the EU are avoided, reduce, eliminate pollution, but where it possible.? The current model of society, as demonstrated practice is not forever because it's not a perfect. It is not viable, because they do not create their own intelligence to protect against death in created itself technogeneous disaster.



Figure 7 Existing concept scheme of waste management of production and consumption.

Stopping the process of collapse of ecology in the advanced concept of waste production and consumption with the slogan "Pure is not where clean, pure where do not litter." The model should improve the treatment of waste "under" concept. The prevention, reduction, elimination of pollution, not just where possible and unconditionally and universally.

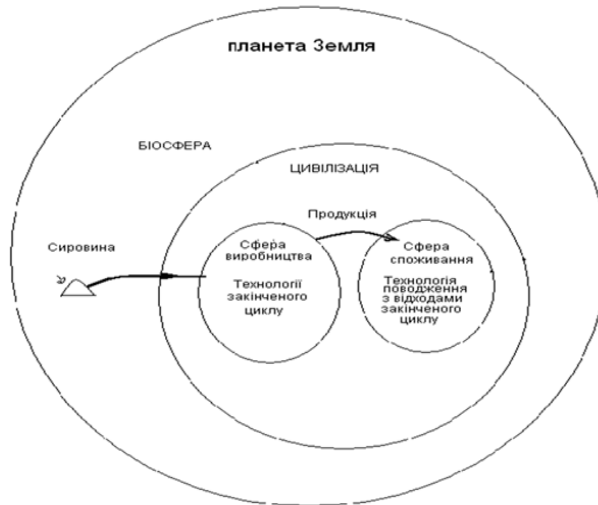


Figure 8 Scheme of naturally protected concept of waste management of production and consumption.

Humanity, including Ukrainian nation must be eternal. Here it is necessary to agree with Jared Diamond conviction. If problems facing humanity, completely created by mankind, to be saved, do not need new technology, you need only the political will to use existing innovations.

Food and Agriculture Organization (FAO) in 1945 embodies the global industrial practice, unnatural way of farming. It is unnatural farming has led to the destruction - the erosion of fertile soil and destroys the world including the Ukrainian resource fertility.

The main prerequisite for termination losses of humus industrial crop growing should return to the field natural way of farming. Another prerequisite for preserving biological life of the nation must be the integrity of the natural and social development: fertility resource - a nation - territory. From the definitions of "resource fertility" and "nation", offered by the authors shows that a whole, an indivisible natural and social development, belongs exclusively to all Ukrainian without any attribution. Only under these conditions and the following concepts, including land ownership and national resource for fertility preservation, restoration and resource increment to the natural fertility of possible suspension of fertility and loss of life at the same time the general improvement of ecology.

By the way, had lost the prospect of saving the nation could return if implemented in practice Ukrainian complex technology of processing organic waste AIC (anaerobic recovery humus), which in 1996 was awarded the State Prize of Ukraine. Even now this system is not in any neighbor countries or abroad. [15] During the 24 past years complex

technology has been improved and can now be the basis of "intensive" way of global recovery and the increment of humus in Ukraine before and above the natural level of stocks of lignin that "prudently accumulated nature millions of years ago. [16]

*Innovative concepts that are based on existing technical solutions.*

In the existing model system of Ukraine over 40-50 years somehow used innovation to solve these problems. But the concept of the requirements established model proved fruitless. There is something that happens, the movement to self-destruction. Basic concepts proposed for solving the existing problems threefold based on real long-term research and industrial research methods tested technology, engineering means implementation of environmental protection, resource recovery, and so on. Among them are basic:

- The concept of national resource fertility tenure;
- The concept of conservation, restoration and resource increment to natural fertility level;
- The concept of drinking water resources saving;
- The concept of waste management of production and consumption;

*Investments.*

Recovery "ruins" of resource support biological life of the Ukrainian nation requires implementation in practice of the array "frozen" and new innovations and a vast array of investments. Marx in the last lines of the fourth volume of "Capital" came to the conclusion: "The real basis of existence of profits (surplus value) is the natural fertility of the land." [17]. In terms of biological life waste and profits do not exist. In society The economy produces two substance useful products and waste. at the cost of production of useful products do not include the cost of neutralizing waste. "due to this, creating private profit. So it turns out that in 26 years of independence Ukraine for profit irrevocably destroyed 1, 6 billion. so productive humus within 3.0 bln. tons, which has remained after the destruction of Ukrainian black soil in tsarist Russia and the Soviet Union.

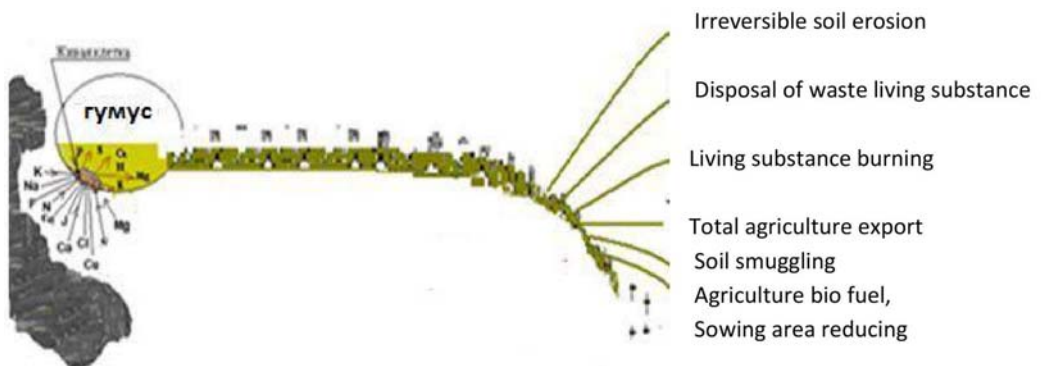


Fig.9 Schematic diagram of misuse of national heritage – humus.

Known investments are not available for projects that do not bring added value. There is an unsolvable conflict. The state is interested in profits destroys humus, and a nation of taxpayers and nature by itself must resist and maintain national humus. With that, the possibility of resistance in both exhausted. Ahead can only abyss. The question of resolving the contradiction between nature and society. Ukraine has no choice but to become a nation - "true civilization." And a critical role in this process elites. Therefore, you should strive to accelerate the process of political change in the country, until finally the nation will patriotically oriented elite who will conduct policy in the interests of the nation most people, and it can save one biological life of the nation and save Ukraine from disappearing from the face of the Earth.

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