HEALTHY LIFESTYLE AND IMPROVEMENT OF ENVIRONMENTAL WELL-BEING

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Annotation: *According to the latest United Nations estimates for the beginning of 2026, the current world population is 8.27–8.3 billion people, and this figure is changing every minute – new lives are being born, and old ones are leaving. Now it is difficult to find a person who has not thought about ecology at least once in his life. Ecology is the science that studies the relationship of living organisms to each other and the environment, or the science that studies the conditions of existence of living organisms, the relationship between the environment in which they live. Everywhere and everywhere we are faced with calls to be more responsible and conscious. Ecology and Health are our future of healthy longevity, which helps us fulfill our plans, successfully solve basic life tasks, overcome difficulties, and if necessary, significant overloads. Good health, reasonably maintained and strengthened by the person himself, ensures him a long and active life.*

Keywords: *Life expectancy is influenced by such indicators as lifestyle, heredity, ecology and working conditions, and healthcare.*

Now it is difficult to find a person who has not thought about ecology at least once in his life. Ecology is the science that studies the relationship of living organisms to each other and the environment, or the science that studies the conditions of existence of living organisms, the relationship between the environment in which they live. Everywhere and everywhere we are faced with calls to be more responsible and conscious and 1 Figure the future is in our hands. According to the latest United Nations estimates for the beginning of 2026, the current world population is 8.27–8.3 billion people, and this figure is changing every minute – new lives are being born, and old ones are leaving. The world's population density in 2026 is 56 people/km2 (144 people/mi2), calculated for a total land area of 148,940,000 km2 (57,506,032 sq mi). Interestingly, the growth rate continues to slow down: if the path from 7 billion to 8 billion took 12 years, then the next mark of 9 billion is expected only by 2037-2038.



Figure 1. The future is in our hands. Compiled from sources and the author's own research materials.

Ahead are forecasts for a peak of 10.3 billion by 2080, with a focus on sustainability, technology, and education. 124 thousand babies are born every minute, and 58 thousand die. During the day, the net increase reaches 66 thousand souls, as if a small city appears out of nowhere 2 figure the population and employment. This dynamic makes the world's population not a static

quantity, but a living organism, where 8.28 billion is only an instant indicator of 2026.



Figure 2. The population and employment. Compiled from sources and the author's own research materials.

Currently, in 2026, 26% (1.9 billion people) are younger than the working-age population, 9% (577 million people) are over 64 years old, 12% (800 million people) work in industry, 6% (430 million people) are unemployed, 23% (1.7 billion people) work in In the service sector, 5% (more than 400 million people) of entrepreneurs, 19% (1.4 billion people) work in agriculture. By 2030, the number of people over the age of 60 will grow by 38%, reaching 1.4 billion, making up one sixth of the world's population. Increasing life expectancy is one of our most significant collective achievements 3 figure the role of sensation in organizational processes. The increase in life expectancy reflects progress in social and economic development, as well as in the field of health, in particular our success in combating fatal childhood diseases, maternal mortality and, more recently, mortality in old age. It has been established that human health depends only on 20-25% of individual genetic factors, and 75-80% on socio—ecological and economic conditions of existence (lifestyle, environment, level of healthcare, etc.).

Life expectancy is influenced by such indicators as lifestyle 49-53%, heredity 18-22%, ecology and working conditions, 17-20%, healthcare 8-10%.

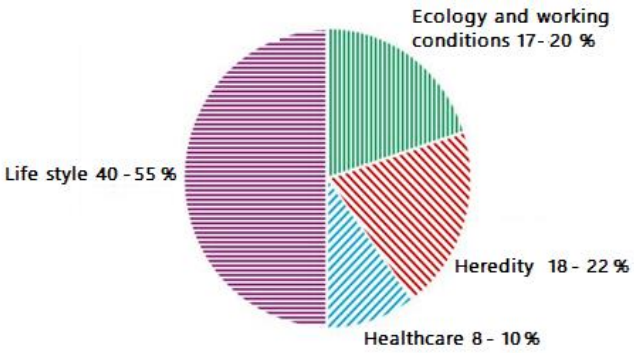


Figure 3. The role of sensation in organizational processes. Compiled from sources and the author's own research materials.

Hence, the relationship between ecology and health is obvious, the need for thorough knowledge and reasonable application of the ecosocial patterns and rules of healthy lifestyle. The Universal Declaration of Human Rights, adopted by the United Nations back in 1948, proclaimed: "Everyone has the right to a standard of living that is necessary to maintain their health and well-being". In 2018, with the technical support of the United Nations UNFPA, the textbook "FUNDAMENTALS OF A HEALTHY LIFESTYLE AND THE FAMILY" was published 4 figure. In 2020, the manual was translated from the original Uzbek into Russian and Karakalpak languages and printed as part of the joint UNDP-UNFPA program "Strengthening the resilience of local communities in the Aral Sea region to environmental, economic and public health vulnerabilities", funded by the Government of Japan.



Figure 4. The book Fundamentals of a healthy life style and the family. Compiled from sources and the author's own research materials.

A healthy lifestyle is an active participation in labor, social, family, household, and leisure forms of human activity. Thus, inactivity causes premature aging, excessive eating, with the almost inevitable development of obesity and vascular sclerosis in these cases, rather than the ability to rest properly, distract from industrial and household worries, are always restless, nervous, and suffer from insomnia, which ultimately leads to numerous diseases of internal organs. Increasing life expectancy is an incredibly valuable resource. It provides an opportunity to take a different look at what old age is, as well as how our whole life can develop. Today, initiatives aimed at improving the quality of atmospheric air, expanding green areas in cities and regions, improving environmental education and culture, as well as

strengthening scientific and practical foundations for combating desertification are very important. On March 23, President of the Republic of Uzbekistan Shavkat Mirziyoyev got acquainted with a presentation on priority national projects in the field of ecology and environmental protection for 2026-2030. Issues of climate transition, adaptation to climate change, food security, sustainable management of natural resources, control of air pollution and waste, as well as the development of a "green" transition are important initiatives of our time. The adoption of joint declarations and programs for 2026-2030, including projects on the conservation of the Aral Sea, the problems of the Caspian basin and the development of green finance are of vital importance. Today, the population of Tashkent has exceeded 3.1 million people, and by 2045 it is projected to more than double. This requires a radical revision of approaches to construction, transport and ecology. Information is provided on the planned measures within the framework of the nationwide Clean Air project, which shows that cases of exceeding the established air pollution standards are being recorded in Tashkent today. A similar situation is also observed in Navoi, Ferghana, Chirchik and Termez. The main factors of pollution are the growth of industry, the widespread use of carbon fuels, an increase in the number of vehicles, natural factors and an insufficient level of control. In this regard, key goals have been identified until 2030: reducing emissions of pollutants into the atmosphere, increasing the share of emissions from industrial facilities, reducing harmful emissions from transport, and reducing the number of days when the PM2.5 level exceeds the established norm.





Figure 5. Total effects on the spectrum of the world. Compiled from sources and the author's own research materials.

It was noted that as a result of the operational measures taken, the air quality in Tashkent has improved to a certain extent. In particular, in January–February 2026, the concentration of PM2.5 decreased significantly compared to the same period last year. Now regional programs will be gradually adopted in this area, and analysis and diagnostics, a unified air monitoring system and an inventory of pollution sources will be organized in each region. The Clean Air project pays special attention to energy and industry. Tax incentives and financial incentives are provided for enterprises that produce some of their products using alternative energy sources, as well as the widespread introduction of automatic monitoring stations, filters, dust and gas cleaning and energy-efficient equipment. Mandatory automatic monitoring posts with data integration into a single geographic information system will be installed at industrial enterprises in Tashkent and adjacent territories. For entities that do not comply with these requirements, compensation payments will be significantly increased. Environmental requirements in the construction sector are also being tightened. For new large facilities, it is planned to increase the proportion of landscaping during design, storage of building materials in closed conditions, waste disposal through special pipes and containers, fencing of sites with protective barriers, installation of online surveillance cameras. In addition, it is proposed to preserve the "wind corridors", to take into account the conclusions of the environmental assessment during construction, as well as to develop a master plan for the management of environmental and water resources of the city. Specific measures have also been identified to reduce the impact of natural dust. These include the creation of a green belt around Tashkent, the organization of green barriers in To prevent dust storms in the Surkhandarya and Syrdarya regions, the creation of artificial lakes and

reservoirs, an increase in the number of fountains in the districts of the capital, as well as the establishment of the processing of foliage into compost and mulch. All this should help reduce the concentration of dust particles in the air and improve the urban environment. Separate directions have also been identified in the field of transport. It provides for a phased tightening of motor fuel standards, an environmental classification of vehicles with the issuance of stickers of the "red", "yellow" and "green" categories, linking technical inspection with environmental requirements, the implementation of programs to update outdated fleets and increase the share of public transport. This will reduce the amount of pollution associated with traffic, especially in the centers of large cities. The issue of greenhouses was also considered as an important component of the Clean Air project. It was noted that a large number of greenhouses are concentrated in Tashkent and the Tashkent region, while the proportion of greenhouses using coal, fuel oil and non-standard fuels as heating sources is high, and emissions of hazardous substances such as No_2, so_2 and PM2.5 have a serious negative impact on air quality. In addition, due to the comparatively lower level of solar insolation in the Tashkent region compared to other territories, the cost of growing produce in greenhouses is significantly higher here. So, if in January the average air temperature in Tashkent is plus 6 degrees Celsius, then in Termez it is plus 10.8 degrees. The cost of growing 1 ton of greenhouse products in the Tashkent region is 11.9 million soums, while in the Surkhandarya region it is 4.9 million soums. Growing products in regions with higher levels of sunlight is beneficial both for the financial stability of the greenhouses themselves and from the point of view of ensuring price stability in the domestic market. In this regard, it is proposed to gradually transfer greenhouse farms in Tashkent and adjacent territories to areas with more favorable climatic conditions and higher energy efficiency. In particular, it is planned to create an agropark with an area of at least 940 hectares in the

Sherabad district of Surkhandarya region. This area is characterized by high solar insolation, milder winters and significantly lower heating costs, which dramatically reduces the cost of production. Starting from October 1, 2026, it is planned to limit the creation of new greenhouses in Tashkent and adjacent territories, and relocate farms will be provided with benefits in infrastructure, lending and logistics. The presentation also provided information about the concept of botanical gardens and arboretum parks within the framework of the Yasil Makon program. As noted, botanical gardens serve the study, conservation, reproduction and display of local and foreign plants, while arboretum parks specialize in the introduction, acclimatization and scientifically based care of tree and shrub species. According to the concept, the botanical gardens will house various floral displays, greenhouses, nurseries, lakes, indoor paths, gazebos and flower areas. Currently, there are 3 botanical gardens in the country, while the project plans to create 12 more botanical gardens and 16 arboretum gardens 6 figure renewable energy sources. At the same time, the most suitable tree and shrub species will be selected for each region, taking into account soil and climatic conditions.



Figure 6. Renewable energy sources. Compiled from sources and the author's own research materials.

By 2028, it is planned to create botanical gardens and arboretum parks with an area of at least 100 hectares in Karakalpakstan, all regions and the city of Tashkent. As a result, by 2030, the country's overall greening level is expected to increase from 14.2 to 30 percent, the concentration of PM2.5 and

PM10 will decrease by 20-25 percent, and the average air temperature in climatically difficult areas will decrease by 1.5–2 degrees. Solar energy is considered promising, although there are certain concerns about the environmental impact of solar panels during operation and after the end of their service life. Zakon.kz. According to Futura Sciences, in China, a solar power plant has "awakened" the desert. A new study conducted in the Talatan Desert in western China shows that the solar panels placed there have created their own microclimate, changing the composition of the soil and contributing to the growth of vegetation. Researchers from Xi'an University of Technology examined a large solar power plant with a capacity of one gigawatt, covering a significant area in a barren desert. The team analyzed 57 environmental indicators, including soil chemistry, temperature, humidity, and biodiversity. The study showed that the overall "health" of the soil directly under the solar panels is twice as good as the uncovered desert soil. The reason is quite obvious: the panels provide permanent shade, retaining moisture and lowering soil temperature. In desert conditions, when there is very little water, these are significant changes that promote plant growth and the development of microscopic organisms that affect soil fertility. Researchers suggest that large solar power plants can be not just a source of energy for human civilization, but also a tool for improving the health of desert areas. The researchers also note the need for further research and study of this effect over long periods of time. At the same time, the concept of creating a National Arboretum Park in the capital was presented. The total area of this large green area will be 108 hectares. The project plans to plant 50,000 tree seedlings and 100,000 shrubs. The park will contribute to the conservation of biological diversity, improve air quality, increase carbon uptake, develop scientific research and breeding work, as well as improve the urban microclimate. It is expected that it will reduce the air temperature by 2-4 degrees and increase humidity by 10-15 percent. The

National Arboretum Park is being formed not only as a green zone, but also as a scientific, educational and public space. It is planned to create a "Trees of the World" zone, collections of plants from six climatic zones, arrays of fruit and local tree species, a garden of medicinal plants, a greenhouse, flower beds, recreation areas, walking and cycling paths, a parking lot and a visitor reception area. An artificial lake with an area of 1 hectare and a cherry orchard around it are planned in the central part of the park. The infrastructure will use modern environmental technologies, such as solar panels, benches and gazebos made from recycled materials, and an automated drip irrigation system. This park will become a natural laboratory for the Central Asian University for the Study of the Environment and Climate Change (Green University), and a center for biotourism and environmental education for the population. As part of the nationwide Ecoculture project, it is planned to form a new system combining environmental education, science and educational activities. It was noted that there is a shortage of specialists in this area who meet international standards, the level of environmental awareness and sustainable habits among the population remains insufficient, and there is also a shortage of personnel capable of putting innovations and climate technologies into practice. In this regard, starting from the 2026/2027 academic year, "green technical schools" will be established in 14 regions, which will be integrated into the Green University system based on academic cooperation. According to the project, the number of students will grow annually and will reach 10,000 by the 2028/2029 academic year. Bachelor's and master's degrees will open up new areas related to the environment and sustainable management, green economics, environmental engineering, climate change, combating desertification, sustainable urban planning and sustainable energy exchange. A dual system will be introduced in the educational process, providing a combination of theoretical knowledge and practice. It also provides for the

allocation of significant funds for the development of the university education system, scientific and innovative projects and educational work. To improve the ecological culture of the population, it is planned to restore the "10 thousand Steps" initiative, launch the "Healthy Lifestyle" platform, as well as hold the GEF-8 assembly and the Eco Expo Central Asia 2026 international exhibition in Samarkand. The draft strategy for combating desertification was considered separately at the presentation. As noted, 70 percent of Uzbekistan's territory belongs to the arid zone, while over 70 percent of the land is subject to degradation. The deterioration of land resources annually causes damage to the economy in the amount of 830 million dollars. As a result of the drying up of the Aral Sea, 3 million hectares of land became unusable, and 56 percent of the territory was affected by wind erosion. In this regard, it is proposed to create a regional joint research center at Green University. It is expected that it will become the first scientific hub in Central Asia for managing desertification processes. The center's structure will include 15 specialized laboratories, digital monitoring of land conditions based on satellite data, GIS and remote sensing technologies, a genetic bank of drought-resistant plants, and an improved system for chemical and physical soil analysis. This will make it possible to create a national system for forecasting and mapping desertification processes, expand the green cover in the Aral Sea region and arid regions, establish sustainable use of pastures and introduce desert economy models. President of the Republic of Uzbekistan Shavkat Mirziyoyev noted and supported the importance of ensuring environmental sustainability, protecting public health, further improving the comfort of urban and rural environments, as well as the widespread introduction of science and modern technologies in the field of environmental protection and environmental well-being.

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