

Samarkand State University policy to ensure the conservation, restoration and sustainable use of terrestrial ecosystems.

1. Restoration and conservation of biodiversity in Uzbekistan is a reliable way to ensure environmental security and sustainable development of the country, as well as adapt to the processes of climate change.

Since 1995, the Republic of Uzbekistan has been a party to the United Nations Convention on Biological Diversity (hereinafter referred to as the United Nations) and has undertaken the following obligations:

development of national strategies, plans and programs for the conservation and sustainable use of biodiversity or adaptation to existing plans and programs;

identification of its important parts for the conservation and sustainable use of biodiversity;

expansion of existing protected areas and creation of new ones to ensure reliable conservation of biodiversity;

to take measures to restore degraded ecosystems and to restore rare and endangered species.

The First National Strategy and Action Plan for Biodiversity Conservation was approved by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 139 of April 1, 1998.

As a result, many projects in the field of biodiversity conservation are supported by the Global Environment Facility (hereinafter referred to as GEJ), the World Bank, the United Nations Development Program (hereinafter referred to as UNDP), the World Wildlife Fund and other international organizations. -strengthened.

Within the framework of this Strategy, a number of national and local programs and plans on environmental protection have included the issues of biodiversity conservation, and about forty international projects in the field of biodiversity conservation have been implemented. As a result, land degradation has been slowed down, desertification processes have been reduced, and other negative consequences of unsustainable use of natural resources have been mitigated.

Despite the results achieved, the impact of negative factors on natural ecosystems and the reproduction of wildlife and plants continues. Continuing to effectively protect the components of biodiversity requires a systematic approach, and the development of comprehensive measures to protect both the animals themselves and their habitat.

2. This Biodiversity Conservation Strategy for the period 2019-2028 (hereinafter referred to as the Strategy) shall be sustainable in terms of priorities, goals and objectives, planning, effective ways to achieve them, as well as long-term conservation and use of biodiversity. aimed at defining the stages of implementation of state policy in the field of formation and development of the system.

3. The Strategy is based on the Constitution of the Republic of Uzbekistan "On Nature Protection", "On Protection and Use of Flora", "On Protection and Use of Wildlife", "On Protected Natural Areas" and "On Forests". It is based on the laws of the Republic of Uzbekistan, as well as the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021, approved by the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. PF-4947.

4. The territory of Uzbekistan is characterized by extreme diversity of natural ecosystems. There are desert ecosystems in the plains, and altitude zones in the mountain ecosystems, and a number of zonal-climatic zones corresponding to the main types of mountain ecosystems are clearly visible.

River and coastal ecosystems are located in both plains and mountainous regions, each with its own habitat. Wetland ecosystems are mainly located in the plains of the country.

5. There are five main types of natural ecosystems for the territory of Uzbekistan. These are:

desert and semi-desert;

foothills and lowlands;

mountain ecosystems;

river and coastal ecosystems;

ecosystems of wetlands.

6. Every ecosystem has complex natural components. They determine the development, survival, and growth of a particular plant world and animal. Each type of ecosystem, in cooperation with other ecosystems, plays a unique role in maintaining the overall ecological integrity of the country and providing specific ecosystem services.

7. The biodiversity of Uzbekistan includes about 27,000 known species. Among them are tall plants, mollusks, lichens (algae-covered fungi), fungi and algae) in total about 11 thousand species, fauna species - more than 15.6 thousand species. The endemism of higher vascular plants in Uzbekistan is about 8%. Preserved endemics make up 10 to 12 percent of the total number of endemic species.

8. The vertebrate fauna of Uzbekistan, which currently includes species registered in the territory of the whole period of zoological research, represents five classes and includes 715 species, including 77 fish species, 3 amphibian species, 61 reptile species, 467 species. species of birds and 107 species of mammals.

9. The endemics of Uzbekistan and Central Asia represent 53 species and subspecies of vertebrates. The rate of endemism in reptiles is 50%, the rate of endemism in mammals is lower - 14%, and the number of endemics for birds is not high - 1.7%. The rate of endemism among fish reaches more than 50 percent.

10. The general degradation and fragmentation of natural ecosystems under increasing anthropogenic influence has led to a reduction in habitats and the number of both rare and resource (hunted) species. Such species are at risk of extinction in the wild and have been recommended for inclusion in the Red Book.

11. 207 species and subspecies of animals are included in various categories of rare and endangered species, 184 of them are included in the Red Book of the Republic of Uzbekistan (2009), of which 24 species of mammals, 48 species of birds, 16 species of reptiles, 17 species of fish , there are 3 species of arthropods, 14 species of mollusks, and 60 species of arthropods.

12. The Red Data Book of the International Union for Conservation of Nature includes 73 species and subspecies of animals. Their future is a global concern.

13. The Annex to the Convention on International Trade in Endangered Species includes 88 species and subspecies of animals.

14. The last edition of the Red Book of the Republic of Uzbekistan (2009) includes 321 species of higher plants and three species of fungi. Compared to previous editions, 23 species were excluded, while 11 new species of plants recognized as rare were introduced, 7 species were included in the status of "declining" due to their increase in nature. It should be noted that in the Red Book of the Republic of Uzbekistan there are 18 species with the status of "Lost".

15. The reduction and significant transformation of natural habitats of animal species is a major threat to biodiversity. At the same time, rare, endangered species, endemics are more vulnerable.

16. The tugai forests, ancient preserved walnut and other fruit forests, wetlands, etc. of the Western Tien Shan and Pamir-Alay are the habitats of endangered and important species of world importance.

17. Over the last decade, as a result of intensive use of nature, some species of animals in Uzbekistan have been exposed to anthropogenic impact, in this regard, their range and numbers have decreased, some species are at risk of extinction or extinction. The number of many animals has not yet reached dangerous levels, but is steadily declining. Habitat degradation and direct extinction were primarily due to the contribution of large predators and ungulates.

18. Constantly increasing anthropogenic impact on nature has led to significant changes in root crops in all regions of the republic. The current state of vegetation is characterized by sparse biomass, low productivity, declining forest area, secondary flora and fauna, and the proliferation of alternative species of plants (plants not intentionally brought to the area away from natural habitat by humans).

19. Some species of animals live in the territory of Uzbekistan during the season, ie during migration. Migratory species of animals include mammals (white-tailed deer, Bukhara deer, pendant, ilvirs (mountain leopard), birds (cranes, wetland plants, etc.), fish.

20. Animal migration takes place mainly in the autumn-spring period. Most of the migration-related animals overwinter in Uzbekistan. In this case, it is necessary to

take into account the number of animals, take measures to protect them and protect their habitats.

21. Uzbekistan is a country with limited forests, but forest ecosystems play an important role in both economic and nature protection relations.

The lands of the State Forest Fund cover 11.2 million hectares, which is 25.2% of the total area of the republic, of which about 3.26 million hectares are covered with forests.

22. Forests of Uzbekistan differ significantly in their natural composition, productivity and functions. Forests are located mainly in the sandy deserts - 9.53 million hectares, in the mountains - 1.12 million hectares, in the lowlands - 0.11 million hectares, as well as in the oases - 0.26 million hectares.

23. The tugai forests, covering about 30,000 hectares, are located in the Republic of Karakalpakstan and make up about 10 per cent of the original tugai forest area in the Amudarya delta. These plots make up 75% of all other tugai forests in Uzbekistan and 20% of the Central Asian tugai forests.

24. The decrease in the area of tugai forests is the reason for the decline of rare and endangered species. The tugai forest massifs are preserved in small narrow strips and separate plots in the river basins and are important ecological corridors for wildlife.

25. One of the important conditions for the development of Uzbekistan is the establishment of a full network of protected natural areas on the basis of rich natural heritage to preserve existing biodiversity.

26. Development of the system of protected natural areas, including:

Lower Amudarya State Biosphere Reserve;

Dormon National Park;

"Saiga" complex landdashft order;

The establishment of the Ugom-Chatkal State Biosphere Reserve was a great success of the republic.

It was also a great achievement to develop the Bukhara specialized nursery "Jayron", to add new natural areas to the international list of wetlands under the

Ramsar Convention, to register and describe 51 important archaeological areas of the country.

27. Today in the republic there are 7 nature reserves (188.3 thousand ha), 1 complex landscape-reserve (628.3 thousand ha), 2 biosphere reserves (111.7 thousand ha), 3 national nature parks (558, 2 thousand hectares), 1 national park "Dormon" (32.4 hectares), 10 natural monuments (3.8 thousand hectares), 12 bookstores (572.4 thousand hectares) and Bukhara specialized nursery "Jayron" (165 , thousand hectares), as well as forests and forest hunting farms (11.121 million hectares).

28. Total area of protected natural areas (protected landscapes - resort natural areas, recreation zones, water protection zones, coastal strips, zones of sanitary protection of water bodies, zones of surface and groundwater formation) that ensure sustainable conservation of biodiversity) It is about 13.2 million hectares. At present, the total area of protected natural areas, excluding forestry and forestry, is 2,079.2 thousand hectares, or 4.64% of the country's territory.

29. For the development of ecotourism in Uzbekistan there is a unique nature, various landscapes (deserts, mountains, plateaus, rivers, lakes, waterfalls), rare and endangered species of flora and fauna, archeological finds, paleontological remains, petroglyphs, rare geological objects. However, the infrastructure in the country is not sufficiently developed to attract tourists to natural sites.

30. Some protected natural areas of the country are the most organized and suitable places for receiving tourists, as these areas have defined areas and borders, areas for tourists, experience of working with visitors, and some - the established routes and the area and its there are employees with specific knowledge of the features.

31. However, the legislation prohibits access to state reserves, nature reserve zones and biosphere reserves for ecotourism, including recreational activities.

32. An analysis of the situation over the last decade shows that the main reasons for the loss of biodiversity and its decline in productivity and the decline in ecosystem services have not changed significantly.

33. The existing risks of biodiversity are mainly related to the development of the economy without taking into account the sustainable use of biological resources.

34. Livestock has a significant impact on natural ecosystems. In desert, foothill and mountainous areas, especially in areas close to rural settlements, pasture degradation is accelerating.

35. The following:

narrow development and management of agricultural irrigation infrastructure;

unsustainable forms of management and use of natural resources in the field of fisheries;

low productivity of irrigated agriculture and unsustainable non-irrigated agriculture are among the growing risks.

These factors, combined with the rapid population growth of the country, lead to the rapid use of all resources.

36. As a result of population growth, the area of settlements has expanded, which has increased the load on natural ecosystems relative to the services provided by ecosystems.

37. Climate change is causing land degradation and desertification processes, thereby affecting the state of biodiversity. These processes are particularly rapid in the Aral Sea, the Ustyurt Plateau, the Kyzylkum Desert, mountain forests and foothills.

38. If current trends continue, the risk of losing basic ecosystem services will increase over the next decade. In addition, climate change is an uncontrollable factor of impact, which can lead to degradation and additional problems of biodiversity loss.

39. The following are the main obstacles to the conservation of biodiversity:

non-compliance of normative legal acts with international standards regulating the use of biological resources;

lack of mechanisms for economic assessment of the value of biodiversity and ecosystem services;

lack of alternative management of the system of protected natural areas and their representative system;

insufficient implementation of the state cadastre and monitoring of the natural environment, including biodiversity;

insufficient funding for biodiversity conservation;

Insufficient introduction of mechanisms for assessing the impact of economic and other activities on biodiversity in the procedure of state ecological expertise;

low public awareness and participation in biodiversity conservation;

insufficient development of ecological culture of the population.

Chapter 4 International relations in the field of biodiversity

40. Uzbekistan is an active participant in regional and international nature protection processes. Cooperation is carried out through the implementation of multilateral nature protection agreements - global environmental conventions, bilateral and multilateral agreements and memoranda. These are:

Convention on Biological Diversity;

Convention on International Trade in Endangered Species of Wild Fauna and Flora;

Convention on Wetlands of International Importance, in particular the habitats of waterfowl (Ramsar Convention);

UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage;

Convention on the Conservation of Migratory Species of Wild Animals;

Convention to Combat Desertification in Countries Faced with Severe Drought and or Desertification, especially in Africa;

Agreement on the Protection of Birds in Wetlands for Afro-Eurasian Migration;

Memorandums of Understanding on the conservation of rare migratory species of animals such as the white-tailed deer, the Bukhara deer, and the Siberian white crane; Central Asian Mammal Initiative; Agreement on the establishment of the International Fund for Saving the Island.

Senior researcher and PhD students have International project (UNDP).
Aim. To conserve **Panthera uncia** and other Red Listed wild plants and animals.









Pallas's cat



Markhor



Panthera uncia.