



Convention on
Biological Diversity



2019

AZERBAIJAN SIXTH NATIONAL REPORT



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PREFACE

Being a Party to the UN Convention on Biological Diversity and in accordance with the Article 26 of the Convention, the Republic of Azerbaijan Republic has prepared the Sixth National Report on the Conservation of Biological Diversity.

National Reports are the most important tool for biodiversity conservation hence sustainable development, which allows the Conference of Parties to monitor the implementation of the Convention providing materials for preparation of the regular Global Biodiversity Outlook. National Reports are also an important tool for planning activities for conservation of biodiversity at the national level providing results of analysis and monitoring strategic activities required for making timely decisions. The Sixth National Reports are one of the sources of information needed for the assessment of the progress towards achievement of the Aichi Global Strategic Goals and the implementation of the National targets in the field of conservation and sustainable use of biodiversity.

The information provided in the Sixth National Reports will be used for preparation of the final review of the implementation of the Strategic plan in the field of conservation and sustainable use of biodiversity for the period 2011-2020 and the achievement of the targets adopted in Aichi. The review will take place at the 15 th meeting of the Conference of Parties in 2020 by issuing the Fifth Global Biodiversity Outlook and conducting the corresponding analysis.

The information provided in the Sixth National Reports will be used for the development of subsequent activities in the field of biodiversity conservation for the period after the year 2020. The Sixth National Report of the Republic of Azerbaijan on conservation of biodiversity has been prepared within the framework of GEF/UNEP the Government of the Republic of Azerbaijan “Technical Support to Eligible Parties to Produce the Sixth National Report to the Convention on Biological Diversity”, and is the result of a thorough analysis and assessment of available data on current state and trends in the field of biodiversity, its conservation and sustainable use.

The report was prepared with the assistance of a large number of specialists from ministries, scientific and public organizations.

The report was prepared following a consultative process with the participation of the stakeholder ministries and departments, leading biodiversity experts, representatives of universities, environmental NGOs, and representatives of various sectors of economy. As part of the preparation of the National Report, a Steering Committee was established, which included official representatives of all stakeholder ministries and agencies.

SECTION I. INFORMATION ON TARGETS IMPLEMENTED AT THE NATIONAL LEVEL

GENERAL INFORMATION ON NATIONAL TARGETS

The protection and sustainable use of natural resources is one of most important global challenges of the 21st century, and is considered a high priority of the state. Biodiversity, which is an integral part of natural resources, is very important but still undervalued rich reserve. Recently, human activities have resulted in, degradation of ecosystems and loss of fauna species. So rapid loss of biodiversity has caused serious threat to our life and planet and all could result in global tragedy. For conservation of biodiversity on the planet, the UN Convention on Biological Diversity was signed at the Earth Summit held in Rio de Janeiro, Brazil in June 1992. The Republic of Azerbaijan ratified this Convention on the 14th of March, 2000 and in order to fulfill the obligations of the Convention at the national level, a “National Strategy and Action Plan of Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity” was approved on 24th of March 2006 by Order of the President of the Republic of Azerbaijan. The activities identified in the National Strategy and Action Plan has been successfully completed.

At the tenth meeting of the Conference of the Parties (COP 10) to the CBD held in Nagoya, Japan, the Parties to the CBD committed to revising their National Biodiversity Strategy and Action Plans (NBSAP) to expand the cooperation, conservation and sustainable use of flora and fauna species, and to meet all the defined goals in order to achieve important results in the field of biodiversity in the period 2011-2020.

The “National Strategy of the Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity for 2019 -2020” (hereinafter – the National Strategy) aims at taking concrete measures and achieving positive results in the field of conservation and sustainable use of biological diversity in the Republic of Azerbaijan as well as the fulfillment of the obligations under the Convention.

National Biodiversity Strategies and Action Plans (NBSAPs) are the principal instruments for implementing the Convention at the national level (Article 6). The Convention requires countries to prepare a national biodiversity strategy (or equivalent instrument) and to ensure that this strategy is mainstreamed into the planning and activities of all those sectors whose activities can have an impact (positive and negative) on biodiversity.

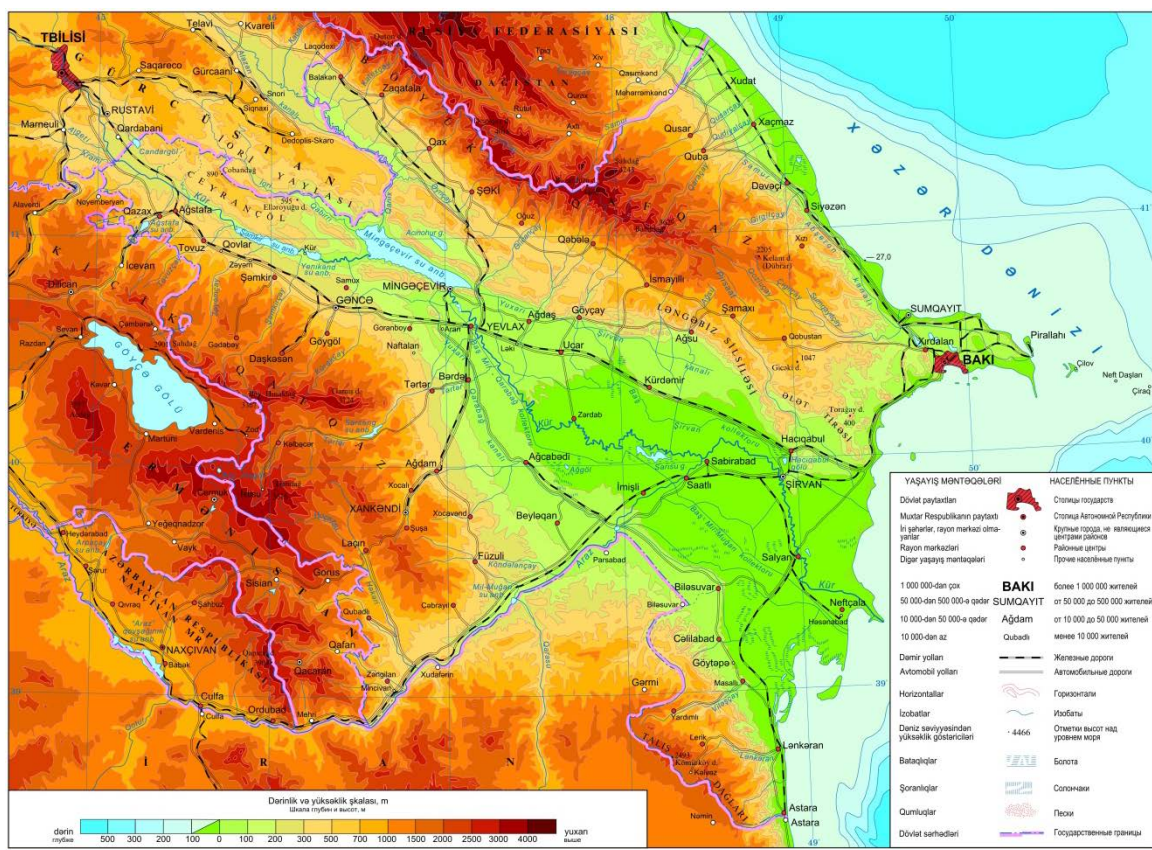
Azerbaijan’s first *National Strategy and Action Plan on Conservation and Sustainable Use of Biodiversity in Azerbaijan* were approved by order of the President of the Republic of Azerbaijan on 24 March 2006.

An overarching international framework for biodiversity-related conventions - the *Strategic Plan for Biodiversity 2011-2020*, with a vision, a mission, five strategic goals and 20 targets (“the Aichi Biodiversity Targets”) – was later adopted by the Parties to the CBD in

October, 2010. All Parties to the CBD committed to revising their NBSAPs to more fully integrate the strategic goals of the CBD Strategic Plan & its Aichi Targets, by 2014.

Azerbaijan initiated the revision of its NBSAP in August 2013- with financial and technical support from GEF, UNDP and GIZ – in order to improve its alignment with the CBD Strategic Plan and to include measurable targets and indicators aligned that will enable the country to report on its contribution to meeting the CBD Aichi Targets.

Azerbaijan borders to Georgia the north-west, Russia to the north, Iran to the south, and Armenia to the south-west and west (see Map 1 below). Azerbaijan has a special administrative sub-division - the Nakhchivan Autonomous Republic - separated from the rest of Azerbaijan by a strip of Armenian territory. A small part of Nakhchivan also borders Turkey to the north-west.



Map 1 Contextual map of Azerbaijan

In addition, the Nagorno-Karabakh region and 7 adjacent districts have been occupied by Armenia in Azerbaijan's southwest, for more than 20 years¹. The occupied area constitutes ~20% of the total territory of Azerbaijan.

Azerbaijan is the largest (with a total land surface area of ~86,600 km²) and most populous country (with a population of ~9.3 million) in the southern Caucasus. The greatest

¹ Shortly after Azerbaijan's independence, Armenia militarily occupied Nagorno-Karabakh and its surrounding territories. Although the UN General Assembly resolution A/RES/62/244 of 14 March 2008 affirms that no State shall recognize as lawful the situation resulting from this occupation, Armenia however still illegally exercises effective control over Nagorno-Karabakh and the occupied territories.

concentration of the population is found in the coastal areas, with more than 4 million people located in and around the capital, Baku.

Geographically, Azerbaijan is dominated by the Caspian Sea forming its eastern border, the Greater Caucasus mountain range to the north, the Lesser Caucasus in the southwest, the Talish Mountains to the south and the extensive flatlands in the centre of the country. About 60 percent of the country consists of mountains and their foothills; the elevation changes over a relatively short distance from lowlands to highlands. Except for its eastern Caspian shoreline and some areas bordering Georgia and Iran, Azerbaijan is surrounded by mountains. The highest elevations occur in the Greater Caucasus, where Mount Bazarduzu rises to 4,466 metres above sea level. Eight large rivers flow from the Greater and Lesser Caucasus Ranges into the central Kura-Araz lowlands, named after Azerbaijan's longest river, the Kura, and its main tributary, the Araz. The Kura drains into the Caspian, forming a delta a short distance downstream from the junction with the Araz.

One of the Caspian Sea's unique features is the relative instability of its sea level. Sea levels in the Caspian Sea have been fluctuating since the Sea became a closed basin about 5.5 million years ago. The Sea is now between -26 and -27 m below oceanic sea levels. The Sea is known to have had peaks and lows ranging from +50 m to -80 m over the last 100,000 years – a fluctuation in levels of some 130 meters during this period. The northern part of the sea is relatively flat, with a maximum depth of about 10 m, while the southern region - which is part of an active tectonic zone - reaches a maximum depth of 1 025 m (the Lenkaran hollow). The average depth of the Caspian Sea is ~187 m. Generally the shallow northern third of the sea freezes in winter. Sea level is cyclical, generally reaching its lowest value in winter and rising during May–July, following the spring floods. The inflow of freshwater (compensated by evaporation over the sea) results in the formation of a north-south salinity gradient ranging from 1-2 parts per thousand (ppt.) in the north to 13.5 ppt.in the north

BIODIVERSITY AND ECOSYSTEM SERVICES

DEFINITION OF BIODIVERSITY

For the purpose of this Strategy, the components of biodiversity comprise the following:

Ecosystems - the variety of habitats, biotic communities and ecological processes;
Species - the variety of species, including plants, animals, fungi and micro-organisms; and
Genes - the variety of genetic information contained in all of the individual plants, animals, fungi and micro-organisms.

Biodiversity underpins the functioning of ecosystems and the provision of ecosystem services² essential to human wellbeing. It provides for food security, human health, clean air and water. It contributes to local livelihoods and economic development, and is essential in terms of achieving the Millennium Development Goals, including poverty reduction.

BIODIVERSITY IN AZERBAIJAN

Global significance:

Azerbaijan is situated at the juncture of several bio-geographical areas (the Eastern Palaearctic, Turan, the Mediterranean, Asia Minor, and the Middle East) and contains species of European, Central Asian and Mediterranean origin. The country forms an integral part of the Caucasus Ecoregion, a region with exceptional levels of biodiversity (WWF's Global 200). Azerbaijan also shares the largest inland body of water in the world, the Caspian Sea, with four other countries (Russia, Iran, Turkmenistan and Kazakhstan). The biological diversity of the Caspian Sea and its coastal zone makes the region particularly significant. One of the most important characteristics of the Caspian Sea's biodiversity is the relatively high level of endemic species among its fauna.

Flora:

Approximately 4,846 plant species have been recorded in the country - of which more than 400 are considered endemic to Azerbaijan – across the following types:

Type	Number of species (no. of which are in Nakhchivan)
Non-vascular	346 (39)
Vascular (seedless)	63 (14)
Gymnosperms	24 (18)

² Ecosystem Services are the benefits people derive from ecosystems. Different groups of ecosystem services can be distinguished: provisioning services; regulating services; cultural services; and the supporting services maintaining the conditions for life on Earth.

Angiosperms	4413 (2887)
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This represents around 65% of the floral diversity of the Caucasus region.

Fauna:

Approximately 25,000 species of invertebrates have been recorded from the country. Ninety percent of the invertebrate species belong to the phylum Arthropoda, (including insects, arachnids and crustaceans), with the most common orders including:

Order	Number of species
Lepidoptera	~4500
Coleoptera	~4000
Hymenoptera	~2500
Diptera	~2000
Arachnida	1870
Nematoda	1084
Hemiptera	874
Homoptera	739

Azerbaijan also hosts 667 species of vertebrates, across the following taxonomic groups:

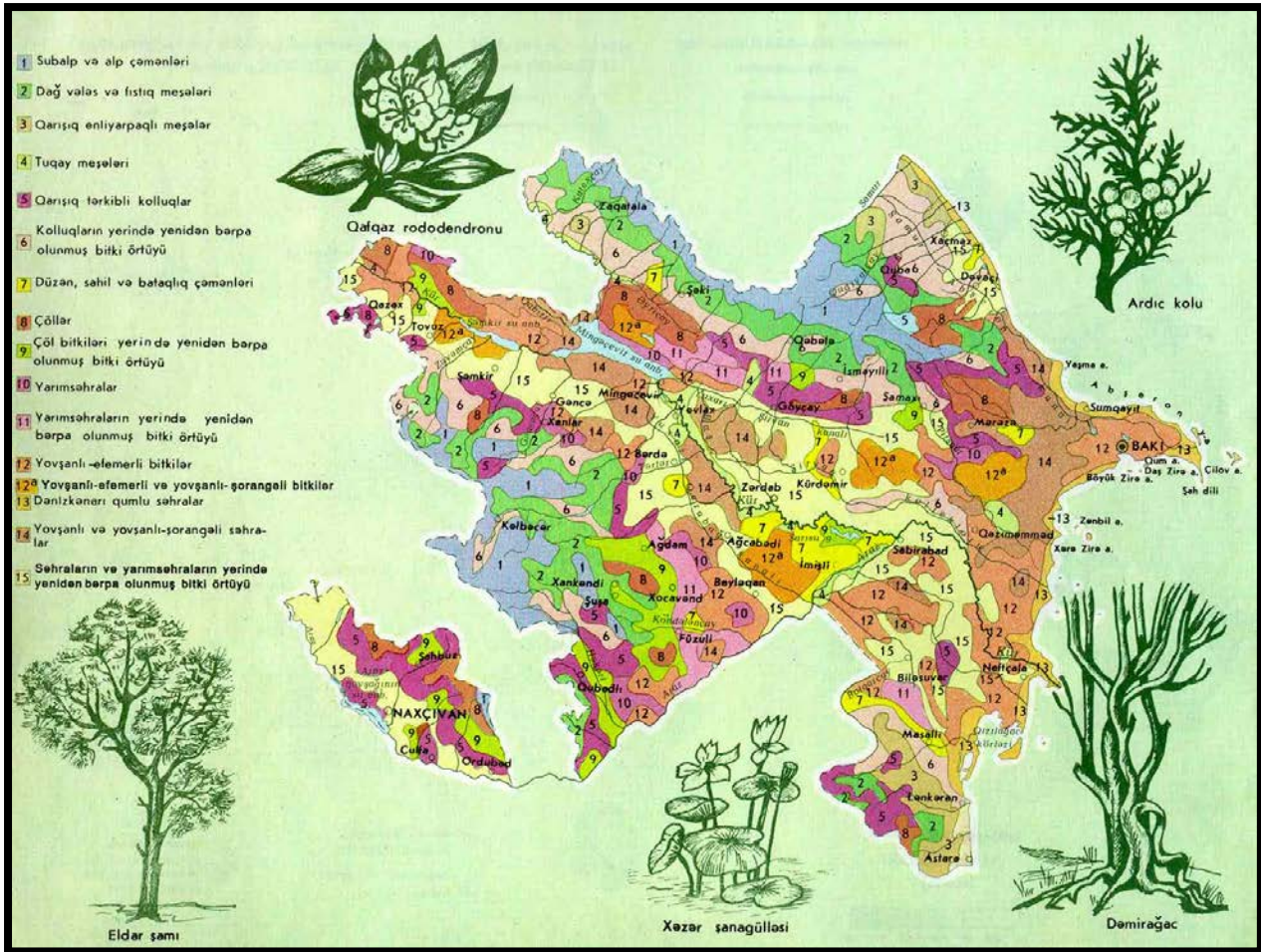
Class	Number of species (no. of which are in Nakhchivan)
Fishes	102 (29)
Amphibians	10 (6)
Reptiles	54 (35)
Birds	394 (241)
Mammals	107 (60)

Azerbaijan is an important migratory path for many bird species travelling from Europe and Russia and south to Africa and Asia. The lakes and wetlands of Azerbaijan support high numbers of waterfowl species that migrate through or winter here, including the White-Headed duck and the globally threatened Lesser White-fronted Goose. Fifty one Important Bird Areas (IBAs) – hosting 31 globally threatened species, 9 biome-restricted species and 15 congregator species - and one Endemic Bird Area (EBA) have been identified.

Azerbaijan has the highest number of mammal species in Europe.

Ecosystems:

Azerbaijan can be divided into the following seven ecosystem complexes, all of which contribute to the large diversity of this small country: Forest ecosystems (lowland and mountain forest habitats); High mountain ecosystems (sub-alpine and alpine habitats); Dry mountain scrubland ecosystems; Steppe ecosystems; Semi-desert ecosystems (wormwood and saltwort semi-desert habitats); wetland and coastal ecosystems (lowland lakes and riverine and coastal wetland habitats); and marine ecosystems. The distribution of the habitats and ecosystems is shown in Map 2 below.



Map 2: Spatial distribution of the terrestrial ecosystems and habitats of Azerbaijan

BIODIVERSITY VALUES

Azerbaijan is considered to be a centre of origin for a number of globally important food crops, including wild rye, wheat, barley, millet, wild pears, cherry, and more than 200 varieties of grapes. Four hundred and fifty four species of graminaceous plants are found in Azerbaijan, 25 of which are cultivated. This includes: 15 varieties of the wheat; one species of maize, with 90 distinct genetic varieties; 10 species of barley, with 500 distinct varieties; five species of rye; and one species of rice, with more than 80 local varieties (including a number of traditional cultivars). Most of the native varieties are now either extinct, or in danger of extinction. Only one of these native varieties (*Secale cereale*) is still under cultivation.

The country is especially noted for fruit and nut trees. The forests of the Greater and Lesser Caucasus Mountains and the Talish Mountains contain wild ancestors of apples, persimmons, walnuts, chestnuts, pistachios and many other species that have been widely domesticated into many different varieties and strains.

Some of the wild plants are widely used as fruits and vegetables in Azerbaijan, including: cherries; plums; cornel; hawthorn; forest strawberry; Russian cherry-plum; sea-buckthorn; apple; medlar; sour cherry; blackthorn; raspberry; and wild varieties of onion.

Approximately 800 indigenous plant species of medicinal value have been recorded in Azerbaijan, 150 of which are commercially used in pharmacological practice.

Some native plants are recognized as important sources of pollen and nectar for honey, and others provide flavouring for natural beverages and teas. A number of local plants are used to produce oils, doshabs and syrups (e.g. walnut, pistachio, hazel nut, beech, grapes, tomato, pomegranate, garlic, pumpkin, peach, apricot and sour cherries).

Azerbaijan flora is rich with colouring materials, primarily used in carpet-making. Approximately 1500 plant species have been used as colorants, including mulberry, chesnut, osage orange, barberry, walnut and oak.

A number of local plant species are exported for commercial purposes, including cultivated liquorice, linden, cane, tulips, nettle (*Urtica dioica*) and *Betula* spp.

Various construction and furniture materials are made from the wood of native forest species, including Hornbeam, Georgian oak, Caucasian oak and European yew.

Some mammal (e.g. European hare, ginger fox, golden jackal and wild boar) and bird (e.g. ducks, geese, coot, pigeons, quail and pheasant) species are being traditionally hunted for food, while there is a growing demand for commercial hunting packages for foreign hunters (e.g. hunting of Eastern Caucasian Tur).

THREATS TO BIODIVERSITY IN AZERBAIJAN

Land Degradation:

Extensive areas of Azerbaijan are being severely impacted by *soil erosion* and *salinization*. It is estimated that 3.7m ha (~42% of the territory of Azerbaijan) is subject to the damaging effects of erosion, while 0.6m ha (~7% of the territory of Azerbaijan) is adversely affected by salinization, to the extent that it is now no longer suitable for agriculture. The salinization and erosion of soils tend to be a result of poor irrigation and drainage systems, overstocking of livestock, unsustainable levels of ground water extraction and ongoing deforestation.

Land degradation is being further exacerbated by the *weak regulation* of building and construction activities in Azerbaijan, as well as the limited capacity for effective controls on mitigating the environmental impacts of industrial developments.

Large-scale use of *fertilizers, pesticides, and herbicides* has also degraded arable lands. This has been mainly caused by uncontrolled imports of these chemicals into the country, as well as the poorly-informed use of these chemicals by local farmers.

Habitat fragmentation:

The *alteration and depletion of forest resources* has historically had severe ecological impacts in Azerbaijan. In some parts of the country (e.g. on the slopes of the Talish mountains) forests are being still further fragmented as economically valuable timber species (such as nut and oak) are being illegally harvested.

Forests are also occasionally impacted by *wildfires*, most occurring as a result of the burning of maize fields in winter and grass in summer.

The *conversion* of the lowland grasslands into agricultural land, through ploughing and scrub removal, is fragmenting many remaining areas of natural steppes. A number of steppe ecosystems are also being further fragmented by the extensive network of *irrigation channels*, particularly in the Kura-Araz plain.

The *construction of dams and reservoirs* on the major rivers flowing into the Caspian Sea has created obstacles that are effectively fragmenting riverine habitats for some key species. For example, the construction of the Mingechevir and Bahramtapa reservoirs on the Kura and Araz rivers has reduced the breeding areas for anadromous sturgeon species because they are now unable to pass the dams to reach upstream breeding areas.

Unsustainable levels of natural resource use:

Land degradation in the grasslands and semi-arid areas of Azerbaijan is increasing at a rapid rate, largely as a result of *overgrazing*. Livestock husbandry in Azerbaijan is very profitable, so there is continual pressure to increase the size of herds of livestock (mainly sheep, goats and cattle) well beyond the carrying capacity of the vegetation. Recent monitoring of livestock shows that the number of animals per hectare is 10-50 times higher than the grazing norm in some areas, and even more in other areas. This is resulting in the incremental increase in both the extent of the areas under grazing pressure, and the intensity of the grazing pressure. The intensive use of pastures in many areas - such as in the Absheron and Gobustan area – is also resulting in accelerated soil erosion, and the increasing desertification of land. Further, additional herds have also been brought in by refugees and ‘Internal Displaced Persons’ (IDP) from the occupied districts around the Dahlig-Garabagh region. Many of the animals owned by these communities are now concentrated in areas that are largely unsuitable for livestock, for a variety of reasons, including competition for water and food near settlements and exclusion from summer grazing areas due to conflicts in some mountainous areas. Many winter grounds are now being utilized for livestock grazing throughout the year.

In theory, while all hunting is strictly regulated in Azerbaijan, in reality *illegal hunting* - for both subsistence and commercial purposes - of wild birds and game species is still widespread and relatively poorly controlled.

Overfishing - driven by subsistence uses, the demand of local consumers and international demand for black caviar - is widespread in the Caspian Sea and spawning rivers. In spring, spawning sturgeon in the shallow warmer waters often become the victims of illegal poachers. Indiscriminate methods – such as the use of explosives, electric shocking and poisoning - are threatening stocks of sturgeon and other fish species³. The regulation of fishing licenses and quotas are also not always effectively administered by some of the Caspian littoral states.

Of the approximately 1 billion m³ of fresh water used each year, just under 350 million m³ is lost due to the *poor state and management of the water distribution systems* in Azerbaijan. Of the water used, 70% is sourced from neighbouring countries, and there is currently an annual water deficit in the country of ~400 million m³.

³ The Convention on International Trade in Endangered Species (CITES) has now listed all sturgeon species as threatened, including all commercial Caspian varieties.

Pollution:

Although several actions have recently been taken to clean up the country - particularly in Baku and the Absheron peninsula - severe pollution can still be found in many areas of the country. Of particular concern is the limited infrastructure and capacity for effective waste management, particularly in many rural areas and smaller towns.

In previous years, Caspian *petroleum and petrochemical industries* have contributed significantly to the air and water pollution problems in Azerbaijan. It is estimated that 14,000ha of land in Azerbaijan is still contaminated by oil. While considerably better managed today, oil pollution from active wells, platforms and pipelines are still an occasional problem.

The Caspian Sea not only suffers from oil pollution, but also from a massive inflow of *other pollutants* originating from the industries in the river basins of its tributaries, mainly the Volga and Kura-Araz basin. Even today, untreated *municipal, industrial and agricultural wastes* from some neighbouring countries still adds to the flow of the Kura river (which is an important source of water for Azerbaijan) - via the Mingchevir Reservoir (which fortunately acts as a settlement area for some of the pollutants) - through Azerbaijan to the Caspian Sea.

Soils throughout the region were also previously contaminated by *DDT and toxic defoliants* used in the cotton production during the Soviet era.

Invasive species:

There are several species that are considered to be invasive in Azerbaijan. One of the most notable is the comb jelly *Mnemiopsis leidyi* - an introduced species that invaded the Caspian Sea through the Volga Don channel. Its population has now multiplied to the extent that the biomass of the population has exceeded the general productive biomass of the sea.

Invasive plant species include the widely distributed common ragweed, buffalobur nightshade and the Russian knapweed.

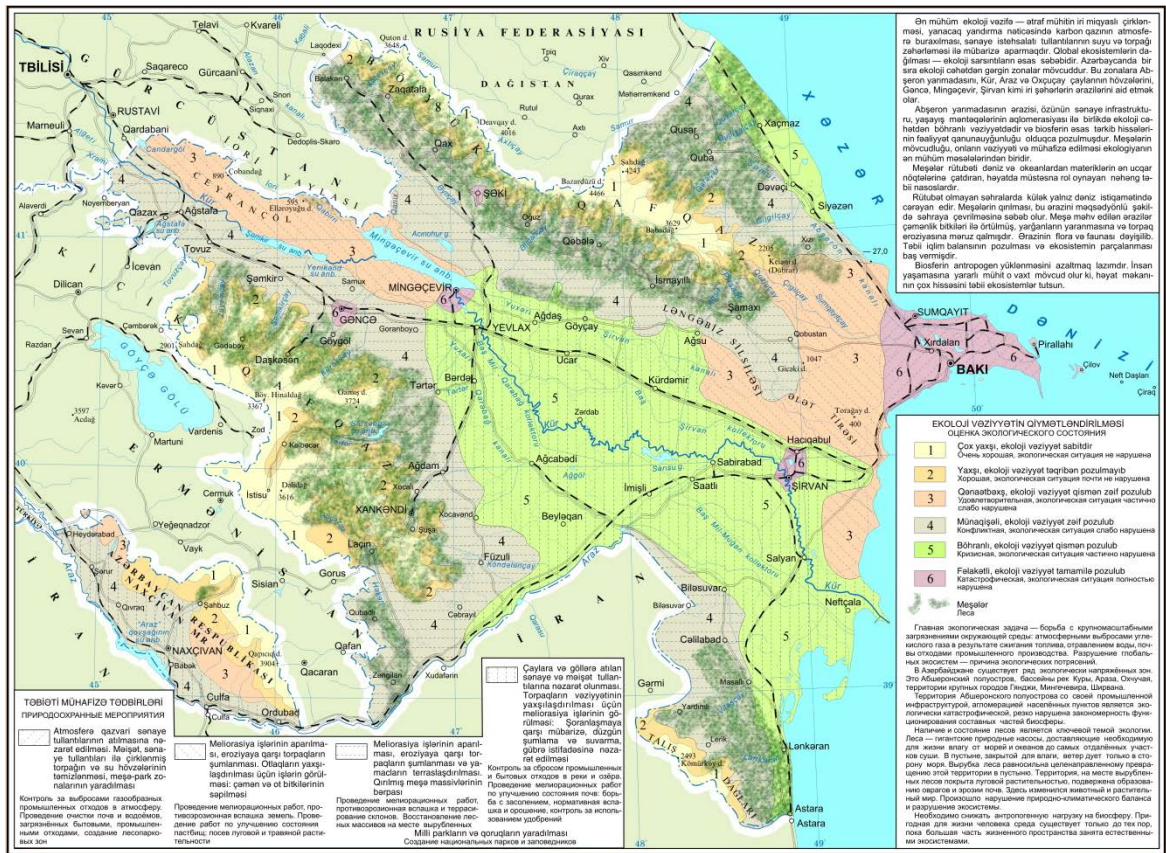
The introduced American racoon has now successfully spread into most of the forests of Azerbaijan.

The invasive fall webworm is also known to cause substantial damage to commercially grown ornamental trees and shrubs and to several agricultural crops.

Climate change:

The biodiversity of the marine and coastal environment in Azerbaijan may be particularly vulnerable to the effects of climate change. At present, most scientists seem to agree that climate change plays a significant role in sea level fluctuations in the Caspian Sea, since temperature increases and changes in precipitation directly impact the overall water balance. It is forecast that mean annual temperatures in the Caspian Sea will increase by between 3.7 and 4.9⁰ C by the middle of next century, while annual precipitation will increase by an average of 52mm (GFDL, CCC and UKMO models) or decrease by between

4-8mm (GISS model). There is however still a lack of reliable data, information and analysis of climate change on water level fluctuations and the concomitant social, environmental and economic impacts⁴.



Environmental evaluation map

RARE, THREATENED AND ENDANGERED SPECIES

The Red Book of Azerbaijan (2014) contains updated information on the status of rare, threatened and endangered wild plant and animal species for the entire territory of the country, including Azerbaijan's sector of the Caspian Sea. The current version of the Red Book lists 338 species of higher plants, 12 species of fungi, 23 species of lower plants and 223 species of fauna (including 74 insect species, 6 amphibian species, 14 reptile species, 9 fish species, 72 bird species and 42 mammal species).

⁴ Various studies carried out by the Caspian Sea littoral states vary greatly in their analysis of the impacts of climate change.

POLITICAL AND INSTITUTIONAL FRAMEWORK

INTERNATIONAL AGREEMENTS GUIDING BIODIVERSITY CONSERVATION AND USE

Azerbaijan is a signatory to the following key international environmental agreements:

Convention	Ratification
Convention of the World Meteorological Organization	03.10.1993
Convention concerning the Protection of the World Cultural and Natural Heritage	06.12.1993
The Convention on International Trade in Endangered Species of Wild Fauna and Flora	23.07.1998
European Convention on the Conservation of European Wildlife and Natural Habitats	28.10.1999
Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters	09.11.1999
International Plant Protection Convention	14.03.2000
United Nations Framework Convention on Climate Change	18.07.2000
UNESCO's Convention on Wetlands of International Importance, especially as Waterfowl Habitat	18.07.2000
Convention on Biological Diversity	03.10.2000
Stockholm Convention On Persistent Organic Pollutants	09.12.2003
Convention on Trans-boundary Effects of Industrial Accidents	04.05.2004
Cartagena Protocol on Biosafety (under the Convention on Biological Diversity)	23.03.2005
Framework Convention for the Protection of the Marine Environment of the Caspian Sea	04.04.2006
European Landscape Convention	24.06.2011

NATIONAL LEGISLATIVE CONTEXT FOR BIODIVERSITY CONSERVATION AND USE

Key national environmental laws in Azerbaijan include the following:

The Law on Environmental Protection provides the broad legal framework for protection of the environment and its natural resources. The law describes, in general terms, the rights and duties of the state, local authorities, individuals and public organisations; acceptable uses of nature and natural resources; the system of regulation of natural resource use; the development of inventories and monitoring of environment and natural resources; the regulation of the degree of overall environmental protection and activities that damage the environment; the assessment of enterprise and activities for compliance with environmental norms and standards and impact on the environment; and research, public education and data management.

The Forest Code regulates the protection and utilization of forests. The Code establishes the legal basis for the regulation of forests and their funding, use, protection, preservation, reintroduction and expansion. The Forestry Code also makes provision for a number of regulations that more specifically define the general rules laid down in the Code.

The Law on Fauna and the Law on Protection of Flora establishes the legislative framework for the protection and sustainable use of fauna and flora.

The Law on Fishing establishes legislative provisions for: the organisation and management of fishing operations; and the breeding, use and protection of fish stocks.

The Law on Specially Protected Nature Areas and Objects provides the legal framework for the classification, establishment and expansion of 'Specially Protected Nature Areas' (SPNAs).

The Law on Environmental Safety determines the legal basis for organizing and exercising phytosanitary controls and regulating cooperative governance in the field of plant protection and plant quarantine.

The Law on Phytosanitary Control regulates the manufacturing, sales, and import of pesticides, agrochemicals, biological and other related substances.

The Law on Protection of the Atmosphere provides the legal framework for mitigating the effects of harmful and polluting atmospheric substances.

The Law on Environmental Education and Awareness of the Population defines the national approach to, and requirements for the implementation of, environmental education and awareness-raising activities.

The Framework Convention for the Protection of the Marine Environment of the Caspian Sea (the 'Tehran Convention') serves as a legal umbrella for the conservation of the biodiversity of the Caspian Sea, specifying general requirements and institutional mechanisms. Four ancillary Protocols cover four priority areas: (1) Protocol on the Conservation of Biological Diversity (TC/COP3/5 - draft); (2) Protocol on the Protection of the Caspian Sea against Pollution from Land-based Sources and Activities (TC/COP3/6 - draft); (3) Protocol concerning Regional Preparedness, Response and Cooperation in Combatting Oil Pollution Incidents (signed in 2011)

INSTITUTIONAL CONTEXT FOR BIODIVERSITY CONSERVATION AND USE

The Ministry of Ecology and Natural Resources (MENR) is the primary government agency responsible for biodiversity conservation and the sustainable use of natural resources (i.e. forestry, wildlife, and fish) in Azerbaijan. The key responsibilities of the MENR cover six broad areas: (i) environmental policy development; (ii) environmental protection; (iii) water monitoring; (iv) water management; (iv) protection of freshwater and marine natural resources; (v) forest management; and (vi) protected areas.

Other key ministries that play an important role in the conservation and/or sustainable use of biodiversity include:

The Ministry of Agriculture (MA) is the primary government agency responsible for regulating and controlling the means of agricultural production and processing in Azerbaijan. The key responsibilities of the MA cover six broad areas: (i) agricultural policy, planning and standards; (ii) livestock production and processing (including infrastructure and equipment); (iii) crop production and processing (including infrastructure and equipment); (iv) agricultural reforms and food security; (v) land use, monitoring and environmental protection (including veterinary services); and (vi) agricultural research (plant and animal).

The Agency of Tourism (AT) is the primary government agency responsible for the development of tourism in Azerbaijan. The key responsibilities of the AT cover four broad areas: (i) tourism policy and planning; (ii) tourism media and communications; and (iii) tourism development.

The Ministry of Industry (MI) is the primary government agency responsible for the development of the industrial manufacturing and energy production sectors in Azerbaijan. The key responsibilities of the MIE cover four broad areas: (i) industrial and energy planning, policy and standards development; (ii) facilitating investment conditions for the manufacturing sector; (iii) improving the efficiencies of energy supply; and (iv) energy research and development.

The Ministry of Finance (MF) is the primary government agency responsible for regulating the financial sector in Azerbaijan. The key responsibilities of the MF cover four broad areas: (i) financial, budgeting and tax policies; (ii) forecasting, budgeting and financial management of state budget; (iii) development of financial markets; and (iv) controlling the movement of funds.

The Azerbaijan National Academy of Sciences (ANAS) is the main state research organization in Azerbaijan. The ANAS is divided into 5 departments (with more than 30 affiliate research and cultural institutions): Physical, Mathematical and Technical Sciences; Chemical Sciences; Earth Sciences; Biological and Medical Sciences; Agricultural Sciences; and Humanities and Social Sciences.

The International Commission on Aquatic Resources of the Caspian Sea (ICARCS) regulates fisheries in the Caspian Sea region by defining the Total Allowable Catch (TAC)

and distributing the catch quota regarding major commercial fish species (sturgeon, kilka, seals) between Iran, Kazakhstan, Russia, Azerbaijan and Turkmenistan. The Commission also coordinates conservation activities related to the sustainable use of Caspian aquatic bi-o-resources, supports scientific cooperation and data exchange, and coordinates scientific research.

AZERBAIJAN DEVELOPMENT CONCEPT – 2020: THE VISION OF THE FUTURE

The National Development Plan - *Azerbaijan Development Concept 2020 (NDC 2020): Outlook for the future* - provides the overarching framework for mainstreaming biodiversity into the strategic development priorities of the country.

The NDC 2020 specifically identifies the measures that will be required to protect biodiversity, neutralize the negative impact of the fuel-energy complex on the environment, eliminate the pollution of the sea and its basin, protect marine and freshwater ecosystems, restore green areas and effectively protect the existing natural habitats and resources.

Each State Agency responsible for overseeing the implementation of the different aspects of the NDC 2020 is now in the process of, or has already completed, revising their medium-term strategies and state programs to more fully align with the objectives, outcomes and activities identified in the National Development Plan.

This strategy will thus need to be closely aligned with, and contribute to meeting the strategic objectives and outcomes of, the NDC 2020.

Action Plan of the Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity

No.	Activities	Indicators	Implementing organizations	Relevant AICHI targets
6.1. Ensuring broad extension of environmental education in the society for improving awareness of population on biological diversity and ecosystem services				
6.1.1. By 2020 reflection of the issues related to biodiversity and ecosystem services at all levels of education, mobilization of the required resources and increasing the knowledge of the relevant staff.				
6.1.1.1.	Increasing number of issues related to environmental protection, biodiversity conservation and ecosystem services at different levels of education.	knowledge of the students on the protection of environment, conservation of biodiversity and ecosystem services will increase	MEdu, MENR	19
6.1.1.2.	Providing detailed information on biodiversity and environment in the textbooks	detailed information on biodiversity and environment will be provided in the textbooks	MEdu, MENR	19
6.1.1.3.	Supporting environmental education centers in order to increase knowledge and education of school children on ecology.	the efficiency of the environmental education centers will increase	MEdu, MENR	19
6.1.1.4.	Establishing of information, resources and training centers on conservation of biodiversity and strengthening technical potential to increase capacity and skills of human resources	the level of knowledge and skills of personnel working in the fields related to environment will increase	MEdu, MENR, MAgr	19
6.1.2. By 2020 strengthening the actions for increasing the capacity of existing eco-tourism and use of the potential in the country				
6.1.2.1.	Developing of public awareness and promotional materials about biodiversity, and particularly about the national parks of the Republic of Azerbaijan	components of national parks and biodiversity will be promoted, promotional information will be disseminated	MENR, MNS, MEdu	19
6.1.2.2.	Expanding the database on tourism potential of specially protected areas.	database on different ecotourism opportunities aiming at the development of tourism of the republic	MENR, MNS,	19

		will be established.		
6.1.2.3.	Inventory of nature monuments	updated list of nature monuments will be prepared.	MENR, MNS, MEdu	19
6.1.2.4.	Conducting of advertising info-tours	various tourism packages will be prepared for tour operators.	MENR, MNS,	19
6.1.2.5.	Identifying the tour operators engaged in eco-tourism in National Parks, and holding info-tours for media representatives, local and foreign tourists	awareness on biodiversity and ecosystem services will increase, and vast opportunities for development of various kinds of tourism in the protected areas will be ensured	MENR, MNS	19
6.2. Improvement of monitoring system of biodiversity				
6.2.1.	Improvement of monitoring system by using the progressive methods based on international practice	the implementation of the proposals on improvement of biodiversity monitoring system will be ensured	MENR, ANAS, MCHT, SAARES	12 9
6.2.2.	Assessment of the current status of biodiversity components	environmental assessment document related to the assessment of the current status of biodiversity components will be prepared	MENR, ANAS	12 9
6.2.3.	Development and application of modern monitoring methods	modern monitoring methods will be prepared	ANAS, MENR	12 9
6.2.4.	Inventory of plant and animal species and designing electronic database	Inventory of fauna and flora species in the Republic of Azerbaijan will be conducted and electronic database will be designed	MENR, ANAS	12 9
6.2.5.	Designing Information and Advance Warning System on biodiversity	the system monitoring the loss and reduction rate of biodiversity will be designed	ANAS	12 9
6.2.6.	Maintaining accurate records of bioenergy resources	overall ecological balance will be ensured as a result of the work done in the field of efficient use of bioenergy resources	SAARES, MENR	12 9
6.3. Restoring and preserving biodiversity, ecosystems, genetic diversity				
6.3.1. By 2020 Increasing the effectiveness of protection of environment and biodiversity				
6.3.1.1.	For the inland water bodies of Azerbaijan, and within the Azerbaijani sector of the Caspian Sea, improvement of	pollution of the Caspian Sea, trans-boundary water bodies, as well as	MENR, ANAS,	5,10,8

	the biodiversity components management, prevention of industrial and domestic waste pollution; and development and implementation of action plans to protect biodiversity of water bodies around large residential settlements.	inland water bodies will be reduced, effective protection of biodiversity will be ensured through improvement of monitoring and management systems as well as through availability of a reliable scientifically-sound database.	MES, SOCAR, "Azersu" OJSC, AMWM OJSC	
6.3.1.2.	Study the factors impacting on the sustainable management of forests and wetlands; preparation of action plans on rehabilitation and restoration of areas impacted by human-induced activities; and implementation of pilot projects.	degradation will be prevented as a result of effective management of forest areas and wetlands Guidelines and management plans on conservation and sustainable management of forests and wetlands will be prepared.	MENR, ANAS, MoA	5,10,14,15
6.3.1.3.	Implementation of best practices in management of pastures; implementation of activities for improved management of pastures; preparation of pasture management plans; and implementation of pilot projects.	comprehensive database on winter and summer pastures will be established, maps will be produced, and based on the results of pilot projects will be broadly implemented	MENR, ANAS, MoA	2,7,15
6.3.1.4.	Improvement of control mechanism for observance of the "Procedures on letting the pastures and hay fields on lease and for use"	the standards on using pastures for intended purposes and for grazing livestock will be observed	MoA, MENR, LEA	7,2,4,
6.3.1.5.	Implementation of best practices and preparation of management plans for sustainable use of vulnerable ecosystems and areas without special protection status but where rare and threatened species occur	biodiversity-rich areas without protection status will be effectively managed with the help of management plans and relevant guidelines	ANAS, MENR	5,12,13,14
6.3.1.6.	Implementation of up to date methodologies for inventory and monitoring of forested areas.	current status of forest areas will be assessed and maps will be produced	MENR, ANAS	14,15,5
6.3.1.7.	Development and implementation of urgent measures for ensuring natural restoration and conservation of rare species of biodiversity components and their sustainable use in trans-boundary areas	effectiveness of forest and shrub land management will be improved	MENR, ANAS	5,12,14,15
6.3.2. By 2020 conservation of genetic systems in agro-biological diversities and of genetic diversity of cultured plants and domestic animals including species and varieties having economic and cultural values				
6.3.2.1.	Taking necessary actions for promotion of the use of crop rotation and other efficient agro-technical actions	efficient agro technical methods will be used in agriculture	MoA, ANAS, MENR	7,13,14,15

	and cultivation of crops created by traditional methods by taking into account land and climatic conditions of the regions			
6.3.2.2.	Preparation of pilot projects for the development of organic farming	the results of the pilot projects will be widely used	MoA, ANAS, MENR	13,4,7
6.3.2.3.	Development of proposals and implementation of pilot projects for leaching saline soils, and for artificial reforestation using locally adapted tree and bush species; implementation of ameliorative activities for returning the soil to sowing circle. Implementation of pilot projects on use of organic fertilizers in agricultural areas including high mountain areas	as a result of effectively implemented action plans in erosion-affected areas, productivity will be increased in degraded areas and protective forests will be planted	AMWM OJSC, MoA, MENR, ANAS	3,4
6.3.2.4.	Implementation of the projects for the use of organic fertilizers in agricultural areas, including high mountain areas.	productivity will increase in the agricultural areas and organic products will be obtained.	MoA, MENR, ANAS	7,13
6.3.2.5.	Implementation of activities that increase the use of traditional agricultural plant varieties and animal breeds that are resistant to the detrimental effects of global climate change.	inventory of traditional plant varieties and animal breeds will be ensured, as a result of pilot projects, new and updated lists will be presented and best practice will be provided	ANAS, MoA, MENR	19,13,16
6.3.3. By 2020 improvement of the status of rare and threatened flora and fauna species in the Republic of Azerbaijan as a result of conservation and sustainable use				
6.3.3.1.	Improvement of activities for protection of important rare and threatened plant and animal species in order to ensure their effective conservation	rare and threatened species will be researched and latest updated lists will be included in the third edition of Red Book.	MENR, ANAS, MoA	5,10,11,12,13,14,15
6.3.3.2.	Research and assessment of habitat fragmentation and restoration of important habitats in order to protect national Red Book listed species.	detailed information will be collected about habitat fragmentation and necessary action plans will be implemented in order to prevent related negative impacts.	ANAS, MENR	5,10,11,12,13,14,15
6.3.3.3.	Development of action plans for restoration of rare and threatened plant and animal populations; implementation of reintroduction projects in the country	activities aimed at the restoration of rare and threatened plant and animal populations, including re-introduction projects, will be implemented	ANAS, MENR	5,10,11,12,13,14,15
6.4. Developing and effectively managing the protected areas and expansion of the current network				

6.4.1.	Expansion of protected areas, including in the Azerbaijani sector of the Caspian Sea and terrestrial areas.	total extent of protected areas in the republic will be enlarged by 12% in terrestrial areas and by 2% in coastal areas.	MENR, LEA	5,10,11,12,13,14,15
6.4.2.	Improvement of the system of management of protected areas	the work of management of the protected areas will be improved, taking into account the international practice	MENR	5,10,11,12,13,14,15
6.4.3.	Development of Emerald Network areas within European Neighborhoods Policy framework.	protected areas will be included into the Emerald Network.	MENR, ANAS	5,10,11,12,13,14,15
6.5. Reducing the negative impacts on biodiversity and its sustainable use				
6.5.1. By 2020 elimination of the negative impacts and threats on biodiversity and bringing the environmental conditions in line with the level which will be able to ensure sustainable biodiversity				
6.5.1.1	Assessment of existing and potential negative impacts in biodiversity-rich areas and development of action plans to prevent or to minimize negative impacts.	negative impacts will be identified and all necessary measures to avoid or to minimize those impacts will be implemented.	MENR, ANAS, MoA	8,9
6.5.1.2.	Assessment of impacts of climate change on biodiversity in sensitive areas (e.g. wetlands, high mountains, coastal zones of Caspian Sea) and development of adaptation programs.	assessment will be made on impact of climate change on biodiversity in different ecosystems and the number of mitigation measures will be increased	MENR, ANAS, MoA	8,9
6.5.1.3.	Assessment of current status of invasive species of flora and fauna; identification of their pathways on sea, terrestrial lands and wetland ecosystems; establishment of control mechanisms to prevent their entrance to the country; and designing electronic database on the number and population of the invasive species .	database on distribution, number and population of invasive species will be designed; control mechanisms to prevent their entrance to the country will be strengthened; and the necessary legislative framework to address threats will be in place.	ANAS, MENR, MoA	8,9
6.5.1.4.	Assessment of the population of invasive species that have significantly negative ecological and economic impacts, costing of the impacts and development of mitigation plans.	mechanisms will be developed to improve the management of invasive species.	ANAS, MENR	8,9
6.5.1.5.	Studying and promotion of the use of bio-energy from agriculture and domestic waste.	in case of positive result of the study, bioenergy will be generated from agricultural and domestic waste and	ANAS, MENR, MoA, AMWM OJSC	8,9

		this energy will be used		
6.5.1.6.	Assessment of the transition potential of industry to a "green economy" for protection of biodiversity and sustainable use of natural resources,	with the help of international experts preliminary assessment document will be prepared	MoA, MENR, LEA, municipalities	8,9
6.5.1.7.	The wide promotion of eco-friendly agricultural products	the share of total production of organic agricultural products will increase	MoA, MENR, ANAS, SCSMP	8,9,7,8
6.5.2. . Sustainable Use of Natural Resources related to Biodiversity and Ecosystems				
6.5.2.1.	Assessment of water bio-resources; research of population dynamics of commercial fish species; identification of hunting quotas; and development of aquaculture.	scientifically-sound methodologies will be developed to identify commercial fish stocks and fishing quotas; in the Caspian Sea and inland waters and necessary activities to develop aquaculture will be implemented.	MENR, ANAS	7,6
6.5.2.2.	Preparing and realization of activities for development of sustainable hunting from the perspective of efficient use of biodiversity	necessary legislative framework will be developed to ensure the sustainability of hunting activities.	MENR, ANAS	14
6.5.2.3.	Strengthening controls on the collection and trade of medicinal plants and ensuring sustainable use of such plants	medicinal plants will be collected only by certified physical and legal persons. Regulations and necessary guidelines for collection and use of wild plants will be developed.	MENR, ANAS, MoA, MoH, SCSMP	16
6.6. Improving regulatory framework for ensuring the sustainability of biodiversity				
6.6.1. Improvement of legislative acts concerning directly or indirectly to biodiversity in relation to sustainable use of biodiversity and ecosystem services				
6.6.1.1.	Analysis of the existing regulatory framework, the improvement of legislation related to the international obligations of the country, and development of proposals for improvement of legislation	new legislative acts will be adopted by taking into account the applicable legislative acts and international obligations undertaken by the country in international programs	MENR, MoA	2,4
6.6.1.2.	Conducting researches across the country on biodiversity and development of the next National Report	as the implementation of the obligations stipulated in the "Convention on Biodiversity", the	MENR	17,3

		corresponding report will be presented and transparency in this field will be ensured		
6.6.2. By 2020 for protection of biodiversity from genetically modified crops, the formation of biological safety system				
6.6.2.1.	Development of measures for ensuring the execution of UN Cartagena Protocol on Biosafety	the execution of Cartagena Protocol will be ensured	MENR, ANAS, MoA	16,7
6.6.2.2.	The strengthening of cooperation of state agencies in the fight against genetically modified crops	state agencies will cooperate in the field of monitoring genetically modified crops	MENR, MoA, ANAS, SCC	16,7
6.6.2.3.	Expanding the network of accredited laboratory for the identification of genetically modified crops	the number of specialized laboratories for genetically modified crops will increase	MENR, MoA, ANAS, SCC, SCSMP	7
6.6.2.4.	Strengthening international cooperation for the development of appropriate scientific and technical potential, training of qualified specialists and appropriate technical infrastructure to regulate the turnover of the genetically modified crops in the republic	the number of specialists in regulation of genetically modified crops' turnover will increase	MoA, MENR, ANAS	16
6.6.3. Bringing the regulatory acts on protection of biodiversity in line with the EU Directives				
6.6.3.1.	Improvement of regulatory framework on biodiversity and bringing the national standards in line with the international standards in this field	necessary steps will be taken by improvement of the legal framework	MENR, MoA, SCSMP	1,2,4
6.6.3.2.	Identification of opportunities to accede to the international initiatives on biodiversity by the republic	certain opportunities will be identified and actions will be taken for their implementation	MFA, ANAS	19,20
6.7. Increasing the level of participation of the public and civil society in protection of biodiversity as well as in the decision-making process at national and local level according to the requirements of Aarhus Convention				
6.7.1.	Development of effective mechanisms requiring the public participation by taking into account the provision of gender equality while adopting decisions on	participation of the public will be ensured by taking into account gender equality in the course of adoption and	MENR, ANAS, MoA	18,19,20

	protection and use of natural resources	execution of decisions on conservation and sustainable use of biodiversity		
6.7.2.	Arrangement appropriate events at various forms of environmental education and enlightenment clubs for increasing the interest of certain age groups in nature	proposals on effective activity of environmental clubs will be made, and competitions, exhibitions and meetings will be held in various formats	MENR, LEA	18,19,20
6.8. Developing collaborative management in biodiversity conservation				
6.8.1. Development of cooperation between the relevant state agencies in the field of conservation of biodiversity				
6.8.1.1.	Defining opportunities and developing proposals for cooperation between governmental organizations in biodiversity conservation - including: developing ecotourism; aforestration; preventing forest fires and establishing early warning systems; pasture management, and other issues.	decisions on conservation of biodiversity will be adopted between the relevant state agencies as a result of increasing cooperation and common approach will be applied	MENR, MEdu, MoA, MES, ANAS, MNS, SOCAR	19,20
6.8.1.2.	Expanding bilateral and multilateral cooperation between different governmental organizations for conservation and sustainable use of biodiversity.	necessary measures will be implemented by determining the opportunities of cooperation in certain sphere	MENR, MEdu, MoA, MES, ANAS	19,20
6.8.2. Strengthening cooperation with neighbor counties in relation to conservation of biodiversity				
6.8.2.1.	Taking measures aimed at identification, assessment and addressing trans-border environmental problems	environmental investigations will be conducted and reports will be prepared and cooperation in solving the issues will be expanded	MFA, MENR	20
6.8.2.2.	Taking measures aimed at identification, assessment and addressing trans-border environmental problems	environmental investigations will be conducted and reports will be prepared and cooperation in solving the issues will be expanded	MFA, MENR	20
6.9. Providing adequate resources for conservation and sustainable use of biodiversity				
6.9.1.	Assessment of necessary resources, preparation of proposals and mobilization of resources for conservation of biodiversity and their efficient use	conservation and efficient use of biodiversity will be ensured	MENR, MoA, ANAS	20
6.9.2.	Expanding the use of alternative and renewable energy	the use of alternative and renewable	SAARES,	2

	sources in the regions for conservation of biodiversity	energy sources will be expanded in the regions	MENR	
6.10. Planning the use of biodiversity and strengthening institutional capacities				
6.10.1. Development and implementation of biodiversity-related action plans under the Development Concept "Azerbaijan - 2020: vision.				
6.10.1.1.	Define and implement the necessary measures for the implementation of the commitments related to the Convention on Biodiversity	The targets of the concept addressed to the conservation of biodiversity will be fully achieved	MENR	17
6.10.2. Expansion of opportunities for conservation of biodiversity				
6.10.2.1.	Expansion of existing opportunities for the conservation of biodiversity, assessment of the current and required opportunities, preparation of proposals and inclusion them in the relevant programs, cooperation with international organizations and with non-governmental organizations in this regard	Biodiversity in technical, development of administrative, financial and human resources will be ensured	MENR	20
6.10.2.2.	Strengthening cooperation with international organizations and non-governmental organizations for improving knowledge and skills of human resources operating in the field of biodiversity	opportunities for cooperation will be identified and joint training will be held regularly for capacity building in the field of biodiversity	MENR, ANAS	20

Abbreviations	
MENR	Ministry of Ecology and Natural Resources of the Republic of Azerbaijan
MoES	Ministry of Emergency Situations of the Republic of Azerbaijan
MoFA	Ministry of Foreign Affairs of the Republic of Azerbaijan
MoA	Ministry of Agriculture of the Republic of Azerbaijan
MCHT	Ministry of Communication and High Technologies of the Republic of Azerbaijan
MoH	Ministry of Health of the Republic of Azerbaijan
MEdu	Ministry of Education of the Republic of Azerbaijan
MCT	Ministry of Culture and Tourism of the Republic of Azerbaijan
SCC	State Customs Committee of the Republic of Azerbaijan
SCSMP	State Committee for Standardization, Metrology and Patent
SOCAR	State Oil Company of Azerbaijan Republic
SAARES	State Agency on Alternative and Renewable Energy Sources
ANAS	Azerbaijan National Academy of Science
AMWM OJSC	Azerbaijan Melioration and Water Management OJSC
LEA	local executive authorities

SECTION II. IMPLEMENTATION MEASURES, ASSESSMENT OF THEIR EFFICIENCY, ENCOUNTERED

Obstacles, Scientific and Technical Needs for Implementing National Targets

INFORMATION on the implementation of the National Strategy for the Conservation and Sustainable Use of Biodiversity in the Republic of Azerbaijan

No	Name of the event	Status of implementation	Executive bodies	Period of performance (by year)
1	2	3	4	5
6.1. Ensuring widespread environmental awareness in the community for environmental awareness of biodiversity and ecosystem services				
6.1.1. By 2020, issues related to biodiversity and ecosystem services will be reflected at all levels of education, mobilize the necessary resources and improve the knowledge of relevant personnel.				
6.1.1.1.	Expand	In order to make proper additions to classification of higher educations with regard	ME, MENR	2017-2020

	<p>education on environmental protection, biodiversity conservation, and ecosystem services at all levels of education</p>	<p>to protection of environment and biodiversity, Resolution No.380 of the Cabinet of Ministers of the Republic of Azerbaijan dated September 20,2017 on Amendments to the Resolution of the Cabinet of Ministers of the Republic of Azerbaijan dated June 14,2011 No. 95 which regard to approval of the “Classification of specialties for masters degree in higher education”,”Classification of specialties of doctor-specialist training in residency” and” List of removed decisions of the Cabinet of Ministers of the Republic of Azerbaijan”</p> <p>In various regions of the country, environmental awareness campaigns were held regularly, meetings were held in schools near specially protected natural areas and various educational Institutions,training centers operating in the country, and these campaigns are ongoing. Textbooks and methodical equipments have been developed to enhance environmental education in universities. Students field trips have been organized to the national parks,and this activities are still ongoing.</p> <p>Over the past period , we have conducted regular meetings with entrepreneurs on the development of ecotourism in national parks, the creation of necessary infrastructure, the involvement of local people in these activities ,as well as the implementation of norms,rules and standards on environmental protection. A number of public events have been undertaken to address environmental issues, seminars have been held at various enterprises. Several tour guides are engaged to hold infotours at protected areas for foreign and local tourists and media representatives.</p> <p>Since 2017,educational ecotours have been organized for high school students from different districts of Baku, to Shirvan National Park,and in October 2018 for Shahdag National Park. The students were informed in detail about the biodiversity of the national park,the lifestyle and importance of animals. Additionally,in accordance with the annual work plan of this national park,meetings with schoolchildren from surrounding villages are organized,as well as excursions to the national parks for students.</p>		
6.1.1.2.	<p>Textbooks biodiversity and the wider provision of environmental data</p>	<p>In order to promote environmental education and training in schools, new modular environmental education programs were developed, methodological and manuals were developed with the active participation of staff of the newly established Child and Youth Development Center under Ministry of Education of Azerbaijan. Regular</p>	ME,MENR	2017-2020

	<p>trainings are provided for secondary school teachers to enhance environmental and climate awareness. Additionally, meetings are organized for parents to raise awareness. During 2019-2020, the project "Healthy Generation –Healthy Future" is being implemented jointly by UNICEF and the Ministry of Education.</p> <p>Moreover, a new program has been developed for eco-clubs in secondary schools in Baku with the use of innovative learning technologies. Currently, this program is being conducted for the second year by eco-trainers of the Center for Environmental Education and Practice. The new program includes 13 environmental education modules—"Fundamentals of Ecology", "Animal Behavior". "Human Ecology, Urboecology or Cities of the Future", "Climate Change", "Alternative Energy", "Waste Management", "Bionics, Biotechnology and Bioethics", "Conservation of Biodiversity", "Ecology of the Forest", "Bases of Biodiversity and Environmental Monitoring", "National Parks or Specially Protected Areas", "Green tourism"</p> <p>In order to raise awareness about the environment, especially biodiversity and ecosystem services, in 2019, the German Office for Technical Cooperation (GIZ) jointly with the Ministry of ecology and Natural Resources prepared six infographic and 6 video clips on ecosystem services. The campaign has been promoted on social networks and it has outreached broader audience and has gained public sympathy.</p> <p>With the participation of university students, actions were held to limit the use of plastic products and waste management and to reduce their negative impact on the environment at the same time, a slogan "Let's Say No to Plastic" was prepared.</p> <p>The purpose of this social action with the Ministry of Education is the Republican Center for Child and Youth Development of the Ministry of Education, Yasamal District Executive Power, AzEko LLC, EkoSfera Public Association and EcoBaku. , consistently carrying out educational activities and propaganda activities to limit the use of these products.</p> <p>A total of 145 private containers for collection and sorting of plastic containers have been deployed in 37 cities and regions within the company, initiated by the MENR, to reduce the environmental impact of plastic waste.</p> <p>Enlightenment projects aimed at reducing the use of polyethylene bags and plastic containers have been given eco bags to buyers at several markets at the initiative</p>		
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		<p>of the MENR under the motto "Green Idea for a Healthy Future." The purpose of the campaign is to achieve a gradual reduction in the use of polyethylene bags, and to give priority to the use of eco bags as an alternative means.</p> <p>At the same time in early 2019 at the initiative of the Ministry of the character featured in the cities and regions of developed and placed in containers, and this work is still going on.</p> <p>In addition, the Ministry organized a campaign on the Buzovna beach to clean the coastal areas from plastic and other wastes. During the action, the area of 5 hectares was cleared of wastes, 10 m³ was sorted and transported accordingly.</p> <p>"Impact of plastic bottles and polyethylene bags on the environment", "Waste Management", "Clean Air Monthly", "Green Fire Protection" at enterprises and organizations of the Republic in order to ensure the right of people to live in a healthy environment; "Green Conservation", "Protecting a Healthy Environment" and others. promotional seminars, round tables, meetings, and press speeches were organized.</p> <p>The staff of the Ministry published articles in the media, as well as speeches on the television and radio on the protection of the environment, greening and limiting the use of polyethylene products..</p>		
6.1.1.3.	To support the activities of environmental education centers to promote environmental education and training for schoolchildren	<p>The Republican Center for Child and Youth Development (RUGIM) is implementing the "Green Network" environmental education program in secondary schools in Baku to enhance the environmental education of schoolchildren. The program provides high school students with effective use of energy resources that serve the principles of resource-efficient behavior, creative solutions for the collection and recycling of waste (paper and plastic containers), water saving, healthy nutrition, green space, "green buffet". awareness-raising activities and practical activities to reduce the impact of climate change, and seminars are held with the participation of secondary school teachers. In the summer of 2017, environmental camps were organized for schoolchildren in the field of biodiversity of Azerbaijan, ecosystem services, and conservation of rare animal species through joint collaboration of the Ministry of Education, IDEA Public Union and the World Wildlife Fund's Azerbaijan Office and special training programs. In summer camps under the motto of "Protecting the gazelles" on June 21-23, 2017, "Let's save leopards" on July 5-7, 2017, "Let's return the tubers to our nature" July 19-21, 2017 more than 100 students were introduced to rare</p>	ME, MENR	2017-2020

		<p>animal lifestyle and conservation activities, participated in seminars, knowledge competitions and practical activities related to ecosystem services, and conducted research on the ecological status of the forest, semi-desert and river ecosystems of rare animals. Events and seminars and roundtables on “Conservation of Biodiversity” were organized as part of the “Ecological Months” project under the motto “Transforming Education to Value”, in the direction of Ecology and Health” at various secondary schools in Baku. In addition, meetings were held in the secondary schools located in the regions of the Republic by the state nature reserves and relevant sections of the national parks. During the reporting period, the “Green School” project and the “Environmental Months” were implemented. The “Green School” project provides the design of schools and classrooms in an energy-efficient way. At the same time, important steps were taken to address the structural problems of the “Green School”, and energy and water conservation issues were in the spotlight. The “Green School” project serves to create new greenhouses in Baku schools. The participation of schoolchildren in the greening of this project is of great importance in terms of the environmental education of the younger generation. Within the framework of the “Ecological Months” project, specialists of the Ecology Department held presentations in Baku schools on “Ecology and Economics”, “Ecological Culture”, “Alternative Energy”, “Natural Resources and Biodiversity of Azerbaijan”, “Healthy Lifestyle” and “From Waste to Art”. In collaboration with the Ministry of Education and the German Society for International Cooperation's Biodiversity Management Program (GIZ) in 2017, Republican, district and city centers of ecological education and experience held republican ecological event on the occasion of "May 22 - Biodiversity Day" in secondary schools. Schoolchildren have been able to register plant and animal species in preschools, forests and parks, identify the ecological status of habitats and provide detailed information on conservation measures for rare species. The Republican Center for Child and Youth Development of the Ministry of Education in collaboration with the Ministry of Ecology and Natural Resources and the Ministry of Agriculture held the second stage of the II Republican Competition of schoolchildren in May-November 2017 as part of the annual awareness program on “Eco-friendly products and agrobiological diversity”. About 2000 V-XI Grade students participated in the in the competition of nominations of “Fruit”; Beekeeping; “Livestock”; “Forest</p>		
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	<p>products”; “Vegetable growing”; “Subtropical Plants”; “Floral”; “Cereals”; and “Little Farmer”. Participants of the Ganja-Gazakh, Lankaran-Astara, Guba-Khachmaz, Sheki-Zagatala and other zones demonstrated the results of the year-round ecologically clean production, experimental work on beekeeping, vegetable growing, fruit-growing, poultry and livestock, and forest products. More than 300 “EcoClub” leaders and schoolchildren at the II Ecological Forum of Baku Schoolchildren “Green Network” organized presentations and discussions about Biodiversity Conservation, Environmental Tourism and Ecosystem Services on “Green Tourism”, “Green Thought” and other 10 sections in May 2017. Members of ecologically profiled associations of out-of-school educational institutions in different regions of the country have been actively involved in the conservation and enhancement of biodiversity, improvement of the environment, and greening months. Exhibition "The role of young generation in waste management" was organized at the high school number 62 named after Khalid Guliyev, Nizami district of Baku, the ETSN staff supported this initiative by students in the field of environmental protection and at the school meeting, recommendations were made for waste management to enhance environmental knowledge, an exchange of views on environmental issues was held and the event was reported to the public through the media.</p> <p>"World Maritime Day," the Ministry's specialists "in the Caspian Sea environment protection" seminar, the ministry's office at the Aarhus Public Environmental Information Center, high school students attended the "Caspian Sea environment and measures to improve forthcoming “Round table was held, the MENR staff volunteered with the volunteer participation in the Novkhani coast of the Caspian Sea, cleaned up 3 hectares of plastic and domestic wastes, and organized similar actions in other Caspian shores.</p> <p>Meeting with pupils under the motto “Biodiversity and 25 years of activities” was held at the high school # 6 in Baku, an official of the Ministry was informed about specially protected natural areas in the country, exhibited national parks and protected biodiversity, as well as video footage of the fishermen and paintings made by the students.</p> <p>On June 5, the World Environment Day was organized in the regions, greenhouses were organized, maintenance work was carried out, propaganda measures were taken to protect the environment, the rational use of natural</p>		
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		<p>resources, and the conservation of biodiversity.</p> <p>RUGIM and for students in cooperation with the Ministry of Ecology and Natural Resources on May 22 - Biodiversity Day, 23 May - Day of professional holiday of employees of the Ministry of Ecology and Natural Resources, 24 May - The European Day of National Parks' Environmental Triada "held a rally.</p> <p>On May 22 - Biodiversity Day, specialists have prepared special information sheets and open classes. The questionnaires were answered by 2,300 EcoClub members of RUGIM and members of RUGIM in 58 administrative regions, where information on biodiversity of the local area was collected, 40 members of the Ecological Club "Green Network" of the Ministry of Ecology and Natural Resources the meeting was organized.</p> <p>Schoolchildren's visit to Absheron, Shirvan, Hirkan, Aghgol, Samur-Yalama, Altiagac, Shahdag, Goygol and Zangazur national parks was organized on the occasion of the European National Parks Day.</p>		
6.1.1.4.	<p>Strengthening technical capacity to create resources, information and training centers for biodiversity conservation, enhance knowledge and skills of human resources</p>	<p>Within the framework of Tempus project "Monitoring ecosystems by remote sensing", Baku State University, Sumgait State University and National Aviation Academy purchased special equipment for monitoring ecosystems.</p> <p>Representatives of the teaching staff of higher education institutions mentioned in the course of this project have participated in trainings at the Berlin Technical University in Germany several times. Head of Ecology Department of Azerbaijan State Economic University participated in training at S. Demirel University, Turkey. Lecture was organized by the Public Association "Sustainable Development Society" for students studying Ecology at Azerbaijan State Economic University</p> <p>In 2019, small-scale equipments were purchased at Khazar University to assess the quality of the open air. With these equipment, students are constantly in the field, monitoring various air pollutants.</p> <p>Electronic resource "Human and the Environment" in the Biology section of the Portal (www.edu.az) on the conservation of biodiversity, in the geography section of the www.video.edu.az portal, "Conservation of Flora and Fauna", "Flora and Fauna" video lessons, interactive tasks such as "human and living nature", "Natural associations" are posted in the e-tasks section of the www.e-resurs.edu.az portal.</p>	ME MENR	2017-2020

		<p>The green network of eco-friendly and energy-efficient schools "was held in 2018 in 40 secondary schools in Baku, where students received special knowledge and skills on energy and water conservation, green design, healthy nutrition and waste management. corners "to provide schools with the necessary posters, books, brochures, booklets, and rock samples that reflect natural resources, and this work is continuing.</p> <p>In collaboration with RUGIM, the US Embassy and the "Resm Jewelry" brand, open classes were organized for children on the April 22nd Earth Art Competition, with special presentations on biodiversity conservation.</p> <p>On May 12, the RGIM hosted the 3rd Ecological Forum of Baku schoolchildren and Eco Club members as part of the Green Network Environmental Awareness Program. The forum was first dedicated to the 95th anniversary of the creation of the Young Naturalists movement, which began in 1923 in Baku with the creation of the 'Lovers' Association. The forum was attended by 400 students from 2,000 members of ecoclubs operating in 40 general education institutions in Baku. The Eco Club leaders' annual report was heard, new action plans discussed and flashmobs organized.</p> <p>On June 04-18, 2013, the third phase of the School Competition was held within the framework of the annual educational program on "Ecologically clean products and agri-biodiversity" in cooperation with the Ministry of Agriculture (MoT) and the Ministry of Agriculture (MENR). 3000 schools registered in the economic zones of Nagorno-Karabakh, Lankaran-Astara, Aran, Sheki-Zagatala, Ganja-Gazakh and Baku-Absheron attended by RUGIM to develop a method for calculating carbon footprint in 2019-2020. The methodology will be posted on the Internet in order to disseminate high school students.</p>			
6.1.2.Strengthening of environmental tourism potential in the Republic by 2020 and measures to use existing potential					
6.1.2.1.	Development of advertising and informational products about biodiversity	of and about and	Calendars, banners, booklets, brochures on biodiversity and national parks in the country have been developed and distributed at various international and local events held in our area, as well as in places where there are more people (hotels, public transport stations, airport, etc.). In 2018, a refined book "About Specially Protected Areas of Azerbaijan" has been prepared and published in Azerbaijani	MENR, MCT, MEdu	2017-2020

	especially national parks of the Republic of Azerbaijan	and English, and presented to relevant organizations and to a wide readership. In 2019, new booklets and flyers were prepared in Russian and English for national parks in Azerbaijan. Video of national parks in the country from the beginning of 2018 will be shown at the H. Aliyev International Airport.		
6.1.2.2.	Expanding the database on the tourism potential of specially protected natural areas	<p>More than 105 ecotourism routes have been de-registered as a result of the development of natural tourism, improvement and increasing the number of tourist routes in the territories of national parks since their inception.</p> <p>.Passports contain detailed information about the start and end points of the routes, the purpose of the route, extensive descriptions, pictures, maps, duration, and the required equipment for each route. All routes are provided with picnics and hearths, including benches and other seats for tourists to relax.</p> <p>At the same time, efforts were made to improve the eco-tourism routes in order to increase tourism potential in national parks, with the aim of informing and ensuring the safety of tourists visiting each of the routes in the Azerbaijani and English languages in a uniform format - access, information, guidance and guidance boards.</p> <p>According to proposals made by the Tourism Council Working Group of the Tourism Council of the Republic of Azerbaijan, all routes are equipped with more than a thousand unified road signs.</p> <p>.Also, at the end of 2018, exquisite booklets and flyers have been issued for each national park in the Azerbaijani-English languages related to eco-tourism, and from the beginning of 2019 in English-Russian. At present, a new catalog is being developed for a catalog of environmental tourism routes. The catalog will also be posted on the official website of the Ministry for the use of tourists in electronic form. By the end of 2019, another book of elegant design will be printed. The book will contain information on Azerbaijan's specially protected natural areas.</p> <p>Over the past period of 2019, the number of boards has been increased to raise awareness of existing ecotourism routes, and "baby booths" for young tourists have been organized in national parks.</p> <p>Order No. 512 of the President of the Republic of Azerbaijan dated September 26, 2018 established the Gizilagaj National Park of the Republic of Azerbaijan in the area of 99060.0 hectares. Within the framework of the project "Creation of the National Park" implemented by the UNDP, efforts were made to expand the</p>	MENR, MCT	2017-2019

		<p>infrastructure of the national park and purchase equipment, construct new administrative buildings and posts and acquire the necessary equipment.</p> <p>In addition, appropriate work has been done to demarcate the borders of the national park and establish access-control infrastructure, strengthen the logistics and protection facilities, and improve the protection and control capabilities of the national park staff. The Tourist Information Center has been established to carry out tourism activities in accordance with modern standards. With the establishment of the national park there are great opportunities for tourism activities, 7 tourism routes have been developed and equipped with information boards and destinations.</p> <p>Since September 2019, major repairs have been started at the Wildlife Rehabilitation Center and Rehabilitation Clinic, which operates under the Altiagac National Park. The appropriate infrastructure for tourists' rest on the Little Aggol Lake has been created in the Aghgol National Park. Access to high mountain areas of the Shahdag National Park has been simplified.</p> <p>At present, national parks are working on the development of eco-tourism and assessing the potential, taking into account the ecosystem and specificity of each national park.</p> <p>On April 2-3, 2019 Czech specialists conducted trainings in Ismayilli section of Shahdag National Park, and from 5 to 7 April in Hirkan National Park for employees of national parks, representatives of the State Tourism Agency and several tourism companies "Czech model "</p> <p>In September-October 2019, the eco-convention of Lankaran State University students will also be engaged in the Hirkan National Park by Czech experts.</p>		
6.1.2.3.	Realization of natural monuments inventory	<p>The work on inventory of existing natural monuments in the Republic of Azerbaijan is fully completed. In the near future new lists of relevant appendices for the types of natural monuments will be prepared and submitted to the Cabinet of Ministers of the Republic of Azerbaijan for approval.</p> <p>Taking into consideration the proposal and opinion of the Institute of Botany of the National Academy of Sciences of Azerbaijan, according to the Order of the Ministry of Ecology and Natural Resources No 525/ü dated August 4, 2016, the city of Shaki is the largest and oldest 15-year-old fifteen) Eastern Chinara Tree was given the status of a regionally significant natural monument and was</p>	MENR, MCT	2017-2020

		<p>included in the "List of state nature-protected state monuments - very old trees". Ministry of Ecology and Natural Resources in 2017 to 19 September 836/u According to the decree of Goranboy region Buzlug village located in the "Ice Cave" and Lerik Kalakhana in the village "Castle Mountain" to the region's important natural monument status, and "by the State List of protected natural monuments - geological (paleontological) objects. Ministry of Ecology and Natural Resources, 2018 January 31, 61 / u According to the decree of Lerik region Tikaband near the village of Lerik Forest Protection and Restoration (current Lankaran Regional Forestry Center), 16 of the precinct № 44 and 46 of the housing in the Qulicola called the valley, the area of 33 ha of forest area where trees are spread, has been given the status of a regional nature monument and is included in the "List of State Protected Areas - especially valuable forest areas".</p>		
6.1.2.4.	Conducting advertising infotours	<p>Tour of Veche publishing houses was organized by Tour A Vent, a tourism company of our country in Russia. In addition, during 2017, a group of about 30 travel companies' representatives have organized advertising tours to national parks. In order to increase the interest of students in environmental tourism, round tables were held with the Institute of Geography of the Academy of Sciences of ANAS on "The role of geographical knowledge in the formation of youth tourism skills". During the year tours of the ANAS Central Botanical Garden, Mardakan Dendrari, Museum of Natural History named after H. Zardabi, Zoo, national park members were informed about the diversity of flora and fauna. In 2018, regular infrastructures for national media were organized, and within the framework of the infotainment participants were introduced to the nature of national parks and informed about the protected species. During the current year, groups of about 30 travel companies have visited the national parks</p>	MENR, MCT MEdu	2017-2020
6.1.2.5.	Identification of tourist operators engaged in	Goygol National Park hosted an infotainment for tourism companies and media representatives organized by the Ministry of Culture and Tourism, the Ministry of Ecology and Natural Resources and Baku Travel.	MENR, MCT	2017-2020

	environmental tourism in national parks, holding infotours for media representatives, local and foreign tourists	<p>Visits to several hotels operating in Goygol National Park, as well as other tourism infrastructure, new ecological tourism routes and services within the National Park.</p> <p>In Shahdag National Park was organized an infotainment for tourism companies and media representatives, organized by the Ministry of Culture and Tourism and "Turizm.az". An excursion on the ecotourism route (about 6km from Kuzun village to Laza village, a tour of Laza village and a waterfall) was organized in Laza village of Gusar.</p> <p>In early 2018, an extensive meeting was organized by the MENR with the "Tourism Association of Azerbaijan" to discuss the development of environmental tourism. In summer, infotainment was organized for Shirvan National Park with the participation of tourism companies.</p> <p>Hundreds of nature lovers have been camped in the Samur-Yalama and Hirkan national parks within the framework of the Azerbaijan Scouts Association project and provided detailed information about the participants.</p>		
6.2.Improvement of the biodiversity monitoring system				
6.2.1.	Improvement of monitoring systems using progressive methods based on international experience	<p>Currently, monitoring of biodiversity is conducted by aerospace methods in the practice of the leading countries of the world. These methods are partly used in the Republic of Azerbaijan. In order to improve this area, discussions between AZERCOSMOS JSC and the Ministry of Ecology and Natural Resources are planned to monitor Azerbaijan's low-orbit Azersky satellite images to improve the monitoring system.</p> <p>Currently, monitoring of biodiversity is conducted by aerospace methods in the practice of the leading countries of the world. These methods are partly used in the Republic of Azerbaijan. In order to improve this area, discussions between AZERCOSMOS JSC and the Ministry of Ecology and Natural Resources are planned to monitor Azerbaijan's low-orbit Azersky satellite images to improve the monitoring system.</p> <p>At the same time, the implementation of the Strategy objectives (during construction and operation) can have a significant impact on changing the environmental environment. For example: the construction and dismantling of wind power installations, cabling activities, and the activities of fish and other</p>	MoA ANAS MENR SAARE S	2017-2018

		<p>marine creatures, wind turbines may cause migratory birds to migrate to other areas</p> <p>In order to avoid this and to meet the objectives set out in the "National Strategy", the importance of the area for birds and other living things in the selection of the site during wind power installations is analyzed, and attention is paid to the installation of these sensitive areas.</p> <p>The most important environmental factors in wind park projects are the turbines' noise, vibration, and distribution of infrastructure. Calculations were made to assess the turbines' noise, and the distances for noise levels were determined for the environment. Based on these data, noise maps have been set up around the wind park, and safe distances have been identified. To protect the biodiversity, a 1,000 MW wind energy park was selected as a single site, but 21 fragmented areas were selected.</p> <p>Large areas are required for solar power plants, which may cause biodiversity in those areas. In order to avoid these problems, it is planned to use less important (non-agricultural) land during the selection of areas where solar power plants will be installed, to assess biodiversity patterns in these areas and to conduct regular monitoring. The above mentioned projects in the projects of the Coastal, Sumgait, Surakhani, Pirallahi and other solar power plants, implemented by the State Agency, were installed on unfit and unused lands.</p> <p>At the same time, ArcGis and dendroecological methods and techniques were used to monitor the population status of the common species of <i>Taxus baccata</i>, one of the rare plants of Azerbaijan, spread in the area called "Alchalyk" in Hamarat village of Lerik region</p> <p>An Ecosystem Monitoring Framework has been prepared by an international expert for 4 coastal national parks (Absheron, Shirvan, Kyzylagaj and Samur-Yalama) within the framework of the project "Improving the management of coastal environmental systems within specially protected natural areas of Azerbaijan". Monitoring plans are being developed. Separately, the monitoring plans developed for each national park include up-to-date methods, monitoring results for the current year, as well as shortcomings, lessons learned, and so on. will be reflected. These documents will also serve as a base for the coming</p>		
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		years.		
6.2.2.	Assessment of the current status of components of biodiversity	<p>At the initial stage, the working group, established in connection with the implementation of this strategy, has collected information on the methods currently used in our country for monitoring biodiversity.</p> <p>It provides general information on priority areas of environmental monitoring, general biology and scope of biological monitoring, monitoring of biological resources, and monitoring of flora and fauna, including fish and other aquatic resources, and describes the following methods available in this area;</p> <p>Methods used for the registration of water and coastal birds;</p> <p>Methods of registration of wintering birds in mass assemblages</p> <p>Registration of nesting birds in ravines;</p> <p>Helicopter registration of birds;</p> <p>Definition of species composition and number of birds by photographs;</p> <p>Registration of mammals using stationary video devices;</p> <p>Registration of mammals using GPS devices;</p> <p>The method of counting wild animals.</p> <p>Monitoring of various viruses, phytoplasm and fungal diseases of wheat, fruit and vegetable crops cultivated in different regions of Azerbaijan, and their molecular diagnostics and identification in plant samples collected on the basis of appropriate symptoms.</p> <p>As a result of the phytopathological assessment of the resistance of genotypes of soft wheat cultivated in Azerbaijan to the breeding ground, there has been an increase in the prevalence of carbohydrate disease in wheat varieties compared to previous years.</p> <p>So, Tartar, Gobustan regions Goran settlement of Goranboy region of Russian origin wheat in the wheat fields sorts, in the village of Guba Ema awnless bony and soft wheat fields, Gabala, Ismayilli region Triticum aestivum L. and Triticum durum Desf farms in wheat, as well as in barley (multidimensional) varieties (pods and grasses), hatchlings were observed.</p> <p>At the same time grown in different regions of Azerbaijan during the monitoring phytopathological red, black and white grape varieties, the leaves GLD</p>	MENR, ANAS	2017-2019

		<p>(Grapevine leafroll diseases) symptoms were found.</p> <p>This year, collected the white grape varieties GLD symptoms (torsion leaves, leaves stains on the yellow-green mosaic formation) has been more intense than in previous years.</p> <p>The GLRaV-3 virus, which causes widespread grape leaves to be widespread among GLD diseases, has been identified in pink malt varieties collected from Salyan and Absheron regions.</p> <p>As a result of the monitoring carried out in the current year, Multilocus Sequence analysis of Candidatus Phytoplasma solani isolates from spleen, secY, and mleP1 genes revealed 3 tuples, 4 secY, and 5 mleP1 genotypes among Bois Noir isolates, which are completely different from the other 2 secY and 1 mleP1 genotypes.</p> <p>"Candidatus Phytoplasma solani" Sequence Analysis Multilokus izolyatlarının result of phytoplasma new genotype encountered so far, with three of the four different SecY three tuff and five mleP1 genotype was found.</p> <p>The morphostructure of the seeds of the various species introduced into the Absheron peninsula at different time intervals was studied, and the X-ray analysis of the seeds was performed.</p> <p>Statistical accuracy was investigated between the X-ray parameters of the seeds and their germination rates, and it was established that the seeds of different radiographic characteristics depending on the extinction conditions of those individuals who were cultivated in different regions of Azerbaijan.</p>		
6.2.3.	Development and implementation of modern monitoring techniques	<p>In the selection of plants related to virus, phytoplasm and fungal monitoring of fruit and vegetable crops cultivated in different regions of Azerbaijan, special colored atlases were used to identify symptoms of the disease.</p> <p>Modern serological immunoassay and molecular-disease agents - PCR, RT-PCR, nested-PCR, reverse transcription-PCR, PCR methods KASP, clearly defined, and the RFLP analysis and the identification of species-specific genes have been identified to be sequenced. For the first time in Azerbaijan, the KASP genotyping technology was used for the identification of carcasses.</p> <p>In the laboratory "Ecotoxicology" of the Institute of Physiology of ANAS is conducting research on the toxic effects of heavy metals salts on ichiofuna. One of the main objectives of this work is to create and / or optimize methods for improving the biodiversity monitoring system in relation to environmental</p>	ANAS, MENR	2017-2020

		<p>pollution. In the reporting year, appropriate methods for the study of genotypic cytotoxic effects on blood erythrocytes, morphofunctional and biochemical changes in the hips, brain, and liver in selected infants under the influence of lead acetate were selected and put into practice. In acute infants, lead, half-lethal, and chronic lead acetate have been identified. Fish tests have been conducted for the first 2 layers, and the study of the effects of chronic fatigue is scheduled for 2018. Potential islands and isolated groups of large rare herds and predatory mammals were identified in the country this year. Aerospace methods will be used to identify the corridors between them. Rare model habitat modeling plans will be delivered over the life of the project. In 2017-2019, US Pure Earth, together with Khazar University, conducted an inventory of toxic pollution sources across the country, and a total of 130 sources of contamination were recorded. 74 pollution sources in rural areas are Soviet-era sources of pollution. Crude oil contaminated areas of the Caspian and Pirallahi regions are being monitored and resistant species are classified according to modern methods. Methodological manuals on "Methods of seed protection" and "Study of grass cenosis" based on international experience in the study and conservation of biodiversity are published. Research work on the development and application of modern methods of monitoring of various viruses, phytoplasm and fungal diseases of cereals, fruits and vegetables cultivated in different regions of Azerbaijan continued at the Institute of Genetic Studies of ANAS.</p> <p>When selecting plants, specific colored atlas are used to reflect the symptoms of the disease, while the disease generators are accurately identified using modern serological immuno-enzyme, molecular-PZR, RT-PCR, reverse transcription-PZR, KASP-PZR methods. sequencers.</p> <p>Studies conducted under the "Ecotox" Caspian Environmental Program have shown a high level of contamination of Azerbaijani and Iranian coastal waters by heavy metals and organic matter. Naturally, high levels of such substances are found in the tissues of fish caught. Taking this into consideration, the laboratory "Ecotoxicology" of the Institute of Physiology named after A.Karayev is conducting research on the toxic effects of heavy metals on salts. One of the main objectives of this work is to develop and improve methods for improving the biodiversity monitoring system for environmental pollution. In the reporting year,</p>		
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		<p>the model experiments continued to study the genetic and cytotoxic effects on blood erythrocytes in infants under the influence of lead acetate, morphofunctional and biochemical changes in the hips, brain and liver. Asetatin lead lethal fish weight infants, half-lethal and chronic concentrations were appointed this year to study the effects of chronic concentration of 3 years of work experience completed. On the 30th day of the toxic effects, morphological changes in the tissues of the fish were detected, such as blood stagnation, hydropic dystrophy and melanomacrophous accumulation in the liver tissue, and apoptosis of red cells in the blood. Conducting physiological, histological, and genotoxicological analyzes under the influence of specific contamination of different organs and tissues of fish can be used to develop and optimize appropriate monitoring methods.</p> <p>Methods of monitoring include cytogenetic, molecular genetic and aerospace methods. Cytogenetic methods have been applied for the study of some species. Molecular genetic and aerospace methods designed to develop a corresponding basis.</p> <p>To this end, two grant projects were awarded by ANAS. GIS maps of noble deer, Dagestan tour, Caucasus foam species have been developed.</p>		
6.2.4.	Implementation of an inventory of plant and animal species and the creation of an electronic database	<p>Ministry of Ecology and Natural Resources carried out by the Emerald Network Pilot Project in 2017, over the years, "Berne Convention" included the flora and fauna on their living area, population, dynamics of information on the preparation and SDF - 2.0 program collected 20 kinds GIS maps have been drawn up. In addition, ACCESS collected data on the number of species listed in the Annexes to the Convention and the number of species available in the country. Over the past 2 years, more than 100 species introduced into the Central Botanical Garden have been invented and an electronic database has been created. The natural and cultural dendroflora tree - an inventory of plants across the country are being collected data in an electronic database, Wikipedia and posted on the website of the Institute of Dendrology. The Institute continues to integrate herbar samples stored in the Herbari Foundation into the global virtual database.</p> <p>1550 species of medicinal plants in the flora of the 26 criteria divided into electronic database containing the information was created and formalized. In the Great Caucasus section of Azerbaijan, a collection of literature and literature on species of great nalburun (<i>Rhinolophus ferrumequinum</i>), anthrax nightmare</p>	MENR, ANAS	2017-2020

		<p>(<i>Myotis blythi</i>), Indian tiger (<i>Hystrix indica</i> Kerr.1792), and dwarf mouse (<i>Micromys minutus</i> Pallas, 1771).) a database was developed for the design. During 2017, Caspian water monitoring was carried out on the northern and southern shores of the Absheron peninsula and on the islands of the Absheron archipelago.</p> <p>During the year, 84 bodies were found in the main monitoring area in the area of Buzovna-North GRESS, and after morphological examination, tissue samples were taken from them. In April of the reporting year, on the orders of the Socar-Fugro organization, the Maiden Tower was monitored around the Absheron peninsula and the islands of the Absheron archipelago. No seals were found in the area at that time, and this year, the spring migration from the northern part of the Caspian to the south was delayed. Typically, seals the water area at the end of March, beginning of April are migrating. During the year 2018, and the Apsheron archipelago off the south coast of the Apsheron Peninsula and the islands of the northern Caspian seal deaths were monitored.</p> <p>In the last year, more than 60 species introduced into the Central Botanical Garden have been invented and an electronic database has been created.</p>		
6.2.5.	Establishment of the Biodiversity Information and Early Warning System	<p>That may affect the conservation of biological diversity, climate change, the transformation of landscapes, soil degradation, vegetation cover and the expected change in the current situation in the zone of the Caspian Sea and includes information about the Jeyranchol. The natural dynamics of the Kura mountain depression landscapes and its main regularities have been studied.</p> <p>For this purpose, the differentiation patterns of the existing landscapes were compared with landscapes under natural moisture conditions with the differentiation of landscapes with lithological basis and morphometric elements of relief.</p> <p>As a result, it was possible to identify the main trends in the dynamics of landscapes development.</p> <p>Compared with the 30s of the 20th century, the area of the ground water depth of up to 1m in 2000 was 6 times in the Karabakh plain, 5.5 times in the Mil, 3.2 times in the Mugan plain, 9.8 times in the Salyan plain, and Shirvan. The crisis reached 5.2 times in the plain and 8.2 times in the southeast Shirvan plain.</p> <p>These are reflected in the maps were drawn, geo-ecological zoning map was developed Kura intermountain depression.</p>	ANAS	2017-2020

		<p>The influence of anthropogenic factors on the distribution of agroforestry and winter pastures on the Shirvan plain has been studied, their geochemical features have been studied, groundwater levels have been investigated, and their impact on agroforestry and winter pastures have been determined. In the 19th century the number of Caspian seals in the Caspian reached 2 million, in the twentieth century the number of individuals in the population had declined by one million. In the late 19th and early 20th centuries, 115,000 seals were hunted every year. The number of individuals caught in the 30s of the XX century has reached 227,000 individuals. In the 1960s, the number of seals in the Caspian Sea declined to 350-400 thousand after the seal hunting reached 85-100 thousand. Between 1997 and 2000, there were massive deaths of seals in the Caspian Sea. During the first month of 2000, the number of dead seals reached 30,000, of which 6,000 were registered on the coast of Azerbaijan.</p> <p>As a result of research by scientists of Azerbaijan (Museum of Natural History) and England, for the first time in the Caspian Sea, the main cause of this loss - morbile virus - itta - has been found alive. The number of seals has decreased by 4 times as a result of the massive loss, and now stands at 100-110,000 individuals.</p> <p>Therefore, the Caspian seal is included in the Red Book of Azerbaijan, Iran, Turkmenistan and Kazakhstan.</p> <p>Specifically endangered species are being investigated in our Republic, and "Conducting a survey of vegetation cover, species associations, forest associations, using Azersky" satellite imagery and geo-information services with Azercosmos under a contract.</p> <p>Specifically endangered species are being investigated in our Republic, and "Conducting a survey of vegetation cover, species associations, forest associations, using Azersky" satellite imagery and geo-information services with Azercosmos under a contract.</p> <p>In addition, a database of species habitats will be created to conduct Aero-space surveys.</p> <p>The collection of biodiversity data was continued throughout the reporting period. The information obtained is analyzed and published in the form of articles.</p> <p>The development of computer models of potential habitats of rare mammals, including the GIS maps, is included in the Red Book of the Republic of</p>		
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		<p>Azerbaijan.</p> <p>According to the decision of the Presidium of ANAS, the Institute of Zoology has begun the creation of the National Information System "Azerbaijan fauna".</p> <p>At the same time, the republic habitats for the destruction of threatened species studied, on contract basis, "Azerkosmos" along with "Azersky" satellite images and geo-information services through the use of "vegetation, habitats of species, population density, forest associations composition analysis" project studies is planned.</p> <p>In addition, a database of species habitats will be created to conduct aero-space surveys.</p>		
6.2.6.	Keeping accurate records of bioenergy resources	<p>Different methods have been developed for accurate recording of bioenergy resources. In connection with this, detailed statistical data on plant and animal husbandry complexes in the administrative regions are collected and classified according to different categories.</p> <p>For each region the production of cotton grass and straw, a database for their annual production and the volume of wastes generated from this production was developed. At the same time a map of stocks of cotton grass and straw (straw and wheat and barley residues) was prepared. To prepare a map of the cotton harvest, the list of areas where cotton was planted was first updated. The amount of cotton weeds per hectare was then calculated using the data of the areas used for cotton plantation across the regions. Each hectare of cotton can produce an average of 21.3 tons of cotton weed, which is a valuable biomass material for heat and electricity. The map of straw (straw, wheat and barley stocks) was calculated by taking into account the areas of barley and wheat planted by regions, productivity, and the relative mass of straw. It is possible to obtain an average of 1.5 t straw of wheat and barley per hectare. The energy potential of plant biomass (cotton weed and straw) is 1128 MW in total. At the same time, detailed information on livestock breeding complexes by region (type of cattle, number, etc.) is grouped by region. According to the available livestock and poultry complexes, the energy potential of biomass of animal origin in the country is 280 MWt. In general, the energy potential of manure generated from plant waste and manure in the livestock complex is 1408 MWt.</p> <p>Decision of the President of the Republic of Azerbaijan dated December 6, 2016 to provide 420 MWt of power to ABOEM by 2020 to diversify the energy portfolio</p>	SAARE S, MENR	2017-2020

		in the "Strategic Roadmap for the Development of Utilities (Electric and Thermal Energy, Water and Gas) in the Republic of Azerbaijan" during the planning of the sites, appropriate monitoring activities were carried out in accordance with the relevant clause of the strategy, and the issues of environmental balance and biodiversity conservation were considered. The bioenergy potential has been recalculated at the same time based on the latest statistical data on the cotton, wheat and straw production, their annual production and the amount of waste generated by each bioenergy sector in relation to accurate accounting of bioenergy resources, at the same time, reserves map (straw and wheat and barley residues) has been adjusted accordingly. At present, the total bioenergy potential of cotton plants is 552 MVt and 576 MVt for straw. In addition, the total bioenergy potential of livestock complexes is estimated to be 280 MVt.		
6.3. Conservation and restoration of biological diversity, ecosystems and genetic diversity				
6.3.1. Increasing effectiveness of environmental protection and biodiversity conservation by 2020				
6.3.1.1.	Improvement of management of biodiversity components in inland waters, border waters and Azerbaijani sector of the Caspian Sea, prevention of pollution by industrial and domestic wastes, development and implementation of measures to protect biodiversity of water bodies around	In order to ensure the implementation of the Decree # 243 of the President of the Republic of Azerbaijan dated August 11, 2014 "On the Application of the Law of the Republic of Azerbaijan" On Changes in the Law of the Republic of Azerbaijan "On Fishing" dated June 27, 2014 No. 1015-IVQD The Ministry of Ecology and Natural Resources has issued a number of regulations in accordance with the Order No. 262 of August 18, 2014, with a number of amendments and additions to the existing legislation. In 2017, the ETSN conducted a total of 1,195 monitoring including 47 offshore, of the Azerbaijan sector of Caspian Sea and its coastal areas, as well as offshore facilities and companies, in floating vehicles. During the monitoring, 235 streams from the country to the Caspian Sea were recorded. Physical and chemical, chemical, microbiological, biological and ecotoxicological studies were conducted on 1451 samples taken from these streams and offshore. A total of 17,263 analyzes were performed on the 1,451 samples taken during the 2017 monitoring period. Of these, 5016 are ecotoxicological, 6010 are microbiological, and 6237 are analytical analyzes. Analytical analyzes are carried out on water, bottom sediments, cutting and	MENR, ANAS, MES, SOCAR "Azərsu" OJSC, AMWM OJSC	2017-2020

	large settlements	<p>drilling samples. Water samples include ph, salinity, convergence oxygen, hardness, sulfates, family substances, biogenic substances, biochemical moral demand for oxygen, oxygen demand, synthetic surfactants, petroleum products, and so on. sediments, cuttings and drilling samples are analyzed for oil products and phenols. Ecotoxicological analyzes are carried out using Dahpniamagna and Pontogammarus maeoticus test organisms on imported water, sediment, sludge and drilling samples. Microbiological analyzes are carried out with a "Bio-Trak 4250" analyzer that analyzes 21 samples at the same time that meet the modern standards for the total intestinal bacterial group in the wastewater and seawater samples and the bacterial Escherichia coli bacteria of conventional pathogen. During the current year, environmental monitoring has been carried out in residential areas along the coast of the Caspian Sea, at the State Oil Company's enterprises, in the ports, on the bridges and at the same time at discharges into the sea. The monitoring is being conducted to study the contamination of the Caspian Sea section of the Caspian Sea and its coastal strip. The results obtained during the monitoring were identified and sent to relevant organizations for action, reflecting the information in the bulletins.</p> <p>Relevant works on the construction of new treatment facilities and the installation of sewerage networks for the treatment and discharge of wastewater from the coastal areas were investigated. However, industrial, catering, recreation and other economic facilities located on the coast of the Caspian Sea have not been properly treated.</p> <p>In addition, during the monitoring, it became clear that with the purpose of the wastewater treatment in the northern and southern regions of the country, construction of Biological Treatment Facilities (BTQ) in Khachmaz, Shabran, Siyazan, Salyan, Neftchala, Lankaran and Astara and work on the installation of sewerage systems has been delayed in some areas, but in others the work has not been started yet. Analytical, ecotoxicological and microbiological analyzes of water samples taken from the coastal stripes of Salyan, Neftchala, southern and northern regions were analyzed. The Ministry regularly monitors the quality of water in connection with the implementation of the abovementioned paragraph. At Shamkir, Yenikend, Mingachevir, Varvara and Jeyranbatan reservoirs, serious measures are taken to prevent water pollution by industrial and domestic wastes.</p> <p>In order to prevent the pollution of the Jeyranbatan reservoir, the southwestern</p>		
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	<p>sewage pond was designed to catch and neutralize the sewage into the area. A 276-meter-long ground dam was built, 170 meters of reinforced concrete southeast of the dam was repaired, and dams were located around the dump to the east of the reservoir. 250 meters of ground dam was reconstructed and 2 drainage channels with the length of 750 m were laid around the existing pond to prevent sewage from entering the Ceyranbatan reservoir in the direction of Saray settlement of Absheron district. In the northeastern part of the Jeyranbatan reservoir, in the area where landslides occur, concrete slabs have been reinforced, slopes have been laid on the shoreline. In order to prevent the sewage and sewage penetration from the southern part of the city of Khirdalan into the territory of the Jeyranbatan reservoir, a 2.5 km long drainage collector was cleaned, and the transfer of the collected water to the sewage pump station is provided. As a result, about 30 hectares of cane were abolished and the area was created for the improvement. Reconstruction works have been started in the northern and northeastern dams of the dam and are currently underway. SOCAR has established a Waste Management Center near the Search mountain in Garadagh district to manage drilling cuttings and other waste generated during oil and gas operations in the Caspian region of the Republic of Azerbaijan. BP, TOTAL E&P Absheron B.V. and, taking into account the interest of other international oil and gas companies in using the services of SOCAR's Waste Center, the Center has installed two VacuDry units manufactured in Germany for the processing of drill cuttings. The operation of these facilities is intended to achieve the processing of drill cuttings formed during drilling operations, the re-use of the chemical reagents contained in it, and the significant reduction in waste volumes. Large-scale measures for the effective management of surface water formed during the production processes in the fields of SOCAR have continued throughout the current period. In connection with this, engineering-search works were carried out to install ground water treatment plants at oil and gas fields, as well as injection of treated water into underground horizons. The facility with a maximum capacity of 4,400 m³ / day for oil and sand treatment of groundwater produced by the UK FLS has been partially commissioned since July 2017 at the Oil Stone Production Facility at 2A of Oil Refinery Station of Oil Rocks. Liquid water will be pumped into the utilization wells after oil and sand treatment, and sand collected in the treatment hydrocyclone will be used at NQCI</p>		
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	<p>production facilities. In addition, 10 waste water disposal wells were put into operation, in the Qala Field of named after HZ Tagiyev's, four indoor wastewater rigs were installed for washing wells in closed system at the offshore drilling rigs and these figures were delivered to 45 units on Azneft IB. Implementation of these projects will ensure environmental safety, minimization of technogenic impacts on the environment, management of surface water in a fully closed system and protection of the Caspian Sea's unique ecological system. In 2017, construction and installation of a new water cooling unit with a capacity of 7,000 m³ / h was completed at the NEZ named under Heydar Aliyev Oil Refinery in order to improve the process equipment cooling system. The device has already been in operation since June 1, 2017. As a result, it is projected to reduce the volume of waste water to the Discharge Limits. In addition, during the reporting period 63211,7 tons of 63476,1 tons of waste generated in the management and facilities of SOCAR, as well as 7564 tons of drill cuttings and 275 tons of solid waste was transferred to SOCAR's Garadagh waste center. In addition, 24,753 tons of oil sludge produced at the NEZ named under H. Aliyev oil refinery were neutralized at the Alfa-Laval units of the "Ekol MX" QSC and 408 tons of sour hydrogen was regenerated. Biomonitoring of the anthropogenic pollution levels of different etiologies of the Absheron coastal zone of the Caspian Sea at the cellular and population levels of infusers was conducted. Plankton associations have been investigated in the areas, and the degree of saprobiality has been established for the interrelationship of indicator species. As the water resources of our republic are mainly polluted by the rivers from Armenia and Georgia (Kura, Araz, Ganikh, Kabirri rivers), work is underway to select sites for the construction of new treatment facilities for industrial and domestic wastewater treatment in Azerbaijan. In 2018, 600 tons of hazardous toxic substances are being transported at the site of the old pesticide storage facility in the Salyan region and were transported to the KTN Canyon. The project was implemented jointly by KTN, Khazar University and Clean Earth Organizations. Microelements in solving theoretical and practical problems, such as environmental optimization of environmental conditions, also, to study the distribution and quantities of heavy metals in the soil are very important. From this point of view, in the Greater Caucasus, such as Katechchay, Kishchay, etc. distribution of heavy metals in soil, plants and waters of river basins and the determination of their quantity, the</p>		
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		<p>study of their migration in soil-vegetation and soil-water systems is one of the pressing issues of the day. Calculated biological absorption coefficients (BUΘ) indicate that the amount of heavy metals in a plant depends not only on the biological characteristics of plants, but also on also depends on the amount of plant in the soil. It was determined that the concentration of micronutrients in the water samples taken from the rivers did not exceed the permissible limits and found that their volume in the lower reaches of the river is higher than that of the medium and upper streams. In accordance with the relevant work plan, the ETSN has done a number of activities in 2018 to protect the ecological balance in the Caspian Sea and its coastline. Maritime monitoring has carried out on the Caspian Sea and its coastal facilities and companies, floating vehicles, coastal areas from north to south and as a result, negative environmental impacts have been observed. In 2018, 2451 monitoring (including 315 monitoring at sea) was conducted in the Caspian Sea section of Azerbaijan and its north-south coast, offshore facilities and companies, and 3018 samples were taken. During the monitoring, 128 streams from the country to the Caspian Sea were recorded. Physical and chemical, chemical, microbiological, biological and ecotoxicological studies were regularly conducted on these water samples taken from these streams and offshore.</p> <p>A total of 32976 analyzes were conducted on 3018 water samples taken during the monitoring. Of these, 10842 are analytical, 1,914 are ecotoxicology and 11220 are microbiological analyzes. During 2018, preparations have been made for the construction of a Regional Biological Treatment Plant (BTQ) near Gulalan village of Khachmaz region with the aim of cleaning up and disposing of wastewater formed in the centers of Guba and Khachmaz regions. At present, the newly constructed treatment facilities are under construction to dispose the treated waste water into the Kudyal River. In Khachmaz, the construction of intra-city sewage system is nearing completion. Works on the construction of sewage treatment plants and sewerage facilities in Shabran and Siyazan are underway.</p> <p>According to the project developed by "Hansol" EME Co. LTD of the Republic of Korea, the construction of the "Pirshagi Sewage Treatment Plant" (ÇSTQ), covering the north and northeast coast of the Absheron peninsula, is underway. The construction of this facility is expected to bring about positive environmental changes in the surrounding area. Once the new device is put into operation,</p>		
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	<p>sewage infrastructure will be created in the surrounding areas and will prevent the waste water discharged directly into the lakes and the Caspian Sea without treatment in a large area in the northeastern part of the Absheron Peninsula (11 settlements in the Sabunchu and Absheron regions).</p> <p>BP-Azerbaijan operates in the Azeri, Chirag, Guneshli and Shah Deniz platforms operated by the Azerbaijan Republic, and in connection with the re-development of the shallow part of the Absheron peninsula, more than 300 samples of water and sediment were taken together with BP Participated in an environmental monitoring expedition in the Baku Bay for the Environmental Impact Assessment. In addition, joint monitoring of environmental disorders (domestic faecal discharge, drilling mud, groundwater) was also carried out at BP's production sites (platforms)</p> <p>Physical-chemical, chemical, microbiological, biological and ecotoxicological studies were carried out in the laboratory of the office taken during the monitoring. In the current year, laboratory work on the development of the medical leech (<i>Hirudo orientalis</i>) has been continued, up to 200 leech babies have been taken and released into the lakes of the Mingachevir Scientific Experimental Station. This year, expeditions covering 3 sections on biodiversity, monitoring and study of invasive species of hydrobionts have been organized in the Azerbaijani section of the Caspian Sea and the Takhtakorpu reservoir. Investigations on collected materials are ongoing. A number of micronutrients, including determination of quantities of heavy metals (Mn, Mo, Cu, Zn, Ni, Co, V, Pb, Cd) in the south-west of the Greater Caucasus lands and in river water (Katechchay, Kishchay) play an important role in addressing theoretical and practical problems, such as ecological optimization of environmental conditions. It has been determined that the concentration of micronutrients studied does not exceed the permissible limits for river water according to the International Standard. The amount of zinc element in the Kish river is 0.044–0.049 (YVH 5.0 mg / l); and manganese ranges between 0.041 and 0.052 mg / l (YVH 1.0 mg / l). Relatively high levels of cadmium and lead in the Katechchay water are associated with the impact of the asphalt plant emissions in the basin area. Thus, while the amount of lead and cadmium in the middle stream of the river is 0.0002 and 0.00015 mg / l, respectively, this figure is more than doubled for lead and equal to 0.0005, and for cadmium is equal to 0.000018 mg / l.</p>		
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6.3.1.2.	<p>Investigation of factors affecting sustainable development of biodiversity, development of proposals for creation of artificial forests and artificial forests on anthropogenic soils and implementation of pilot projects</p>	<p>In 2017, the Ministry of Ecology and Natural Resources has done some work on planting, restoration and cultivation of greenery in the areas exposed to anthropogenic impacts, including the highways. The terraced and reinforced works were carried out on steep slopes along the roads. In the Absheron Peninsula and other adjacent arid areas, as well as along the highways, 504,003 different trees and bushes were planted, and the entire area was provided with a drip irrigation system. During the reporting period, 75,601 pieces of trees and bushes were planted around the highway of Zyig-Heydar Aliyev Airport and 18,200 on the Bayil slope. 41 710 units of different trees and shrubs were planted in the Alat-Hajigabul section of the Baku-Gazakh highway, 143,227 units in the Alat-Salyan section of the Baku-Astara highway, 92349 units around the Baku-Shamakhi highway, and 88,470 units around the Baku-Guba highway. At the same time, 30 150 species of different fruit trees have been planted on 70 hectares of the forest fund for the construction of agro-forest areas. In 2017, 300,000 pieces of olive trees, 1,100,000 mulberries, 110,000 pomegranates, 85,000 almonds and 10,000 figs of saplings were cultivated as standard planting material for new gardens.</p> <p>In addition, the plants were given 874 tons of organic fertilizers, 60.03 tons of mineral fertilizers, 24,630 meters of irrigation water lines were laid on the territories of the greening departments, 3,6670,40 units were planted. Seeds of 4,131 kg of trees and shrubs, including 1023 kg of almonds, 110 kg of apricots, 121 kg of peaches, 12 kg of beetroot, 140 kg of other nuts, 2075 kg of olives, 61 kg of pine, 29 kg of cypress, 10 kg Arizona cypress, 25 kg oleander seeds were delivered.460,510 pieces of cultivation material cultivated in previous years have</p>	MENR, ANAS, MoA	2017-2018

		<p>been used in greening offices and in the construction of agro-forest areas; 253 800 pieces of mulberry-weed were transferred to the relevant District Executive Authorities on the basis of the distribution of the Ministry, so far there were 2,793,720 units, including 1,301,480 standard young plant and weavers. 821,190 packs and pocket were made from grown planting material. Generally, large-scale greening projects based on modern methods have been implemented in recent years after reforestation of arid areas and low-quality soils, 5 386,196 trees have been planted on 4,438 hectares, and about 11,000 kilometers of modern drip irrigation systems have been provided. Studying mechanisms of drought, salinization and phytopathogens (viruses, phytoplasm, fungi) on plants in the laboratories of the Institute of Correspondence of AMEA and projects were implemented on the acquisition of cultured plants resistant to abiotic / biotic effects, molecular diagnostics and identification of phytopathogens, and bioremediation of soils contaminated with oil and oil products. Due to environmental stresses, plant productivity and quality drastically decrease and the area of arable land decreases. In this regard, the Institute conducted extensive research on the molecular-genetic, physiological, biochemical and biophysical levels. At the same time, scientists of the Institute prepared the methods on the topics of "Development of bioremediation method of oil and oil contaminated soils in Absheron" and "Application of new methods for cleaning up contaminated soils in Ganja" and environmentally friendly and economically efficient bioremediation methods have been developed and applied in the field of oil and oil products contamination on the basis of international projects. As part of the biological fight against insects damaging crops and forest trees, the Institute of Applied Zoology of ANAS has started the cultivation of the best entomophagous species. For this purpose, the use of various types of maize that are harmful to various agricultural plants. As part of the biological fight against insects damaging crops and forest trees, the Institute of Applied Zoology of AMEA has started the cultivation of the best entomophagous species. To this end, more efficient species have been identified among the Coccinellidae (parabizen) species and are being investigated for their reproduction in order to use against the types of maize that are causing damage to different agricultural plants. Research and development of the Habrobracon hebetor parasitoid against butterfly caterpillars, which have been a major pest of cotton plants, and fruits</p>		
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		<p>have been carried out. For the purpose of establishment of agroforestry areas and establishment of forest plantations by the ETSN, agrarian trees were planted in the area of 2431 ha in 2018 with 1326,61,000 trees planted and forest planting activities carried out. 46,194 kg of seeds were harvested from the forest and fruit breeds and harvested seeds were sown in 27.92 ha of the area. 2250,000 pieces were buried in the area of 35.41 ha for the purpose of growing. 1256,85 thousand weeds were planted on the area of 24.58 ha in the growth department of young plants. For the purpose of cultivation of forest plantations and orchards there was carried out a service in the total area of 32941 hectares (including fruit gardens - 17148 ha) and irrigation in 35098 ha (including 19320 ha of irrigation of orchards). Also, due to the development of cocoon and mulberry plantation in the country, 2300,8 thousand mulberry-weaving and weaving plants were cultivated in 2018, 1315 thousand of those correspond to the requirements of the relevant standard. 472300 mulberry trees from the standard cultivated mulberry trees were donated to local executive authorities in the fall of 2018 for the purpose of laying down mulberry gardens. The work in this direction is currently underway. Extensive research on plant pests and their entomophages has been carried out on pomegranates, cotton, nuts, hazelnuts, etc. in the laboratories of the Institute of Correspondence of AMEA, 30 types of pests that fall into 17 groups on hazelnut, 12 species of entomophagous, 13 types of pests belonging to 4 groups on the walnut plant and 13 types of entomophagous were recorded on nuts. Materials were collected on cotton bean, corn, melons and vegetables, and the number and dynamics of development were monitored. Currently, in addition to the analysis of the material, the <i>Habrobracon hebetor</i> parasitoid is multiplied in laboratory conditions. At the same time, this year, 1 new pest that caused massive damage to the cotton was discovered, and it was identified as a cotton leaf-lover (<i>Syllepte derogata</i>).</p>		
6.3.1.3.	The development of management plans and implementation of pilot projects for the purpose of	<p>According to the order of the Cabinet of Ministers of the Republic of Azerbaijan No. 17 / 4544-10 / 25/31 dated October 12, letter from the Ministry of Ecology and Natural Resources No 4 / 2001-02-05 dated November 11, 2017 on the revised draft of the State Program for the Effective Use of Grazing Areas and Landscapes in the Republic of Azerbaijan for 2018-2020 Submitted to the Ministry of Agriculture. In the winter pastures in the Ceyranchol-Acinohur area, landscape and soil surveys have been carried out, a large-scale landscape map</p>	MoA, ANAS, MENR	2017-2020

	Implementation of best practices in pasture management and effective management of pasture areas	of the area has been developed, and research on landscape transformation has been carried out. The maps of the anthropogenic landscapes of the Acinohur front mount and adjacent areas (scale 1: 100,000) and the "Anthropogenic transformation of natural landscapes in adjacent landscapes and front mount of Acinohur" (scale 1: 100,000) were developed. Gray, gray-brown, alluvial-meadow, meadow-gray, salty-saline and other in the coast of the Caspian Sea region of Khachmaz cuts were made in the soil, samples were analyzed, samples of plant and groundwater were taken. In 2019, GIZ Azerbaijan with ETSN have developed an integrated land management manual for rural municipalities in the mountain regions as part of the IBS project implemented. The handbook provides tips and tricks for erosion prevention and management. In 2019, GIZ provided land management training for farmers and rural municipalities within the Azerbaijan IBS project. In the winter pastures in Ceyranchol-Acinohur, landscape and soil surveys were conducted, large-scale landscape map of the area was developed and research on landscape transformation has been carried out. The maps of the anthropogenic landscapes of the Acinohur front mount and adjacent areas (scale 1: 100,000) and the "Anthropogenic transformation of natural landscapes in adjacent landscapes and front mount of Acinohur" (scale 1: 100,000) were developed. Gray, gray-brown, alluvial-meadow, meadow-gray, salty-saline and other in the coast of the Caspian Sea region of Khachmaz cuts were made in the soil, samples were analyzed, samples of plant and groundwater were taken.		
6.3.1.4.	Improvement of control mechanisms for implementation of "Rules of use, rent of grazing, pasture and mowing areas	Approved by the Decree of the President of the Republic of Azerbaijan No 1138 dated December 6, 2016, the implementation of Action Plan of the Strategic Roadmap for Production and Processing of Agricultural Products in the Republic of Azerbaijan, Subclause 7.3.1 "Establishing Mechanism of Environmental Impact Assessment of Land Acquisition Change Process", the "Instruction on Environmental Impact Assessment of Land Acquisition Redistribution Process" prepared by the Ministry of Ecology and Natural Resources was submitted to the Cabinet of Ministers in coordination with the relevant government agencies. Simultaneously, according to the order of the Cabinet of Ministers of the Republic of Azerbaijan No. 17 / 4544-10 / 25/31 dated October 12, letter from the Ministry of Ecology and Natural Resources No 4 / 2001-02-05 dated November 11, 2017 on the revised draft of the State Program for the Effective Use of Grazing Areas	KTN, ETSN, YİH	2017-2020

	<p>and Landscapes in the Republic of Azerbaijan for 2018-2020 Submitted to the Ministry of Agriculture. The State Program is aimed at the effective use of pasture and hayfields and their degradation, the creation of cultural grazing areas and the extension of the practice of using grasslands in the form of parcels, preserving and enhancing productivity activities aimed at restoring pasture productivity through the use of specific grassland plants adapted to geographical conditions, preserving natural landscape and biodiversity, and ensuring sustainable development. Each farmer in the area of grazing, pasture and haying area, leased by local authorities, has been monitored for the use of rented land in accordance with the requirements of the law, signed contracts with them and reflected in the contract. While distributing summer pastures to individuals who want to rent, the number of sheep and goats, grazing area, water supply, geographical location, etc. were taken into account. Approved by the Decree of the President of the Republic of Azerbaijan No 1138 dated December 6, 2016 "On Production and Processing of Agricultural Products in the Republic of Azerbaijan" in direction of implementation of the Strategic Road Map Action Plan subclause 7.3.1 "Establishing Mechanism of Environmental Impact Assessment of Changing Land Designation" and the "Instruction on Environmental Impact Assessment of Changing Land Designation" project was prepared by the Ministry of Ecology and Natural Resources was submitted to the Cabinet of Ministers in coordination with the relevant government agencies. At the same time, according to the order of the Cabinet of Ministers of the Republic of Azerbaijan # 17 / 4544-10 / 25/31 dated October 12, 2017, the State Program on Effective Use of Pastures and Weeds in the Republic of Azerbaijan for 2018-2020 submitted to the KTN of the ETSN for the developed project. The State Program aims at providing for the effective use of pasture, use of grassland areas and prevention of their degradation, the establishment of cultural grazing areas and the expanding the practice of using cultural pastures in the form of parcel in the queue, implementation of measures to preserve and enhance the productivity potential, restoration of pasture productivity by using the seeds of special pasture plants adapted to geographical conditions, conservation of natural landscape and biodiversity, and ensuring sustainable development. Each farmer in the area of grazing, pasture and haying area, leased by local authorities, has been monitored for the use of rented land in accordance with the requirements of the law, signed</p>		
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		contracts with them and reflected in the contract. While distributing summer pastures to individuals who want to rent, the number of sheep and goats, grazing area, water supply, geographical location, etc. were taken into account.		
6.3.1.5.	Application of best practices and development of management plans for sustainable use of areas that have no special conservation status but are regarded as sensitive ecosystems, has rare and rare species of flora and fauna,	Regular monitoring was carried out to assess the status of rare and endangered plant species in areas with no special conservation status but important for biodiversity. The current state of their population has been investigated and the information obtained has been included in the electronic database of "Rare and Endangered Types of Azerbaijan". Most of the territory of Azerbaijan belongs to ecosystems that do not have special protection status. These ecosystems are undertaking research to determine the risk factors, the number and density of populations, and the availability of fodder resources that affect various species, including species listed in the Red Book of the Republic of Azerbaijan, in order to reduce the pressure and burden of anthropogenic factors. At the same time, the local population is informed about the species of fauna in the areas under study.	ANAS, MENR	2017-2020
6.3.1.6.	Application of modern methodology for inventory and monitoring of forest covered areas	Within the project "Sustainable management of lands and forests in the Greater Caucasus landscape" implemented by the Ministry of Ecology and Natural Resources with the support of the Global Environmental Fund and UNDP, the work has been done on the state programs of sustainable land and forests management, land use and forest management at the district level. The project carried out research on modern methods of forest protection and pasture erosion control and Sustainable Forest Management Plans were developed. The new plans provide for conservation and monitoring of forests based on modern methods. In addition, the carbon reserves of existing forests under the carbon component of the project have been assessed and a modern method (IPCC 2006) for carbon absorption from forests has been applied in pilot areas. A number of trainings and seminars have been held to apply this method locally. In some forest areas of Khizi district, inventory and evaluation of α and β diversity of plant species is carried out using modern techniques. The work on obtaining relevant information for the development of schematic and electronic maps is in progress.	MENR, ANAS	2017-2020

6.3.1.7.	Development and implementation of urgent measures to ensure sustainable use, and preserve the natural reproduction of rare species of biodiversity components in the border areas	<p>Activities in the framework of the "Ecocorridor Program" project supported by the Transboundary Joint Secretariat (TJS) and the Ministry of Ecology and Natural Resources in 2017 with the support of the German Development Bank (KFW) and the World Wide Fund, a regional seminar was held in Tbilisi on November 28 - December 1, 2017 to discuss the results (implemented in Sheki, Gakh, Zagatala and Guba).</p> <p>On December 5, 2017, a regional conference was held in Tbilisi for the development of cross-border ecotourism products, discussion of details and submission of documents prepared under the TJS. In September 2017, a visit of Azerbaijani and Georgian experts to the protected areas of Lagodexi and Zagatala was carried out, which is part of the monitoring activities, followed by a preliminary monitoring event in Lagodechi. The main objective of the event was the development of a joint monitoring plan and a participatory monitoring methodology for the protected areas of Lagodechi and Zagatala. In addition, monitoring was carried out in the areas of the Nakhchivan MR, the Greater Caucasus (Zagatala-Balakan), the Small Caucasus (Gazakh-Tovuz), Masalli-Astara border, and a plan of action was developed for the conservation of rare species. During 2018, the activities carried out within the framework of the Eco-Corridor Program between the Transboundary Joint Secretariat (SOM) and the ETSN with the support of the German Development Bank (KFW) and the World Wide Fund for Nature (WWF). The next phase of the biodiversity reintroduction program of the TJS project is to conduct the necessary technical and field reviews for bison deliver. Therefore, on November 12-21, 2018, the WWF German delegation, the foreign expert on the Byzantine program of TJS, the WWF Azerbaijan representative and the IDEA representative visited the areas where the bison will be reintroduced. At the same time, meetings were held between the Zagatala DTQ and the Georgian Lagodex DTQ on the monitoring of the Eastern Caucasus tour to develop a joint methodology. Besides, AMEA monitors the territories of Nakhchivan AR, Greater Caucasus (Zagatala-Balakan), Small Caucasus (Gazakh-Tovuz), Masalli-Astara, and plans for the protection of rare species have been prepared.</p>	MENR, ANAS	2017-2020
6.3.2 Conservation of hereditary systems in agrobiological diversity by 2020, protection of genetic diversity of domestic animals and plants, including economic and cultural value				

6.3.2.1.	Regions on the ground, taking into account the climatic conditions of agricultural cultivation of crop rotation system and a wide range of measures to promote the use and cultivation of cultivated plants in the traditional way and necessary measures	<p>Farmers and entrepreneurs have been advised on the agro-technical bases of crop rotation, the rules of cultivation and the principles of crop rotation in order to make the system of crop rotation in line with local conditions. Propagation work has been carried out to ensure that crop rotation is the most valuable tool for increasing crop yields, as well as creating conditions for the continuous improvement of soil fertility and preventing the development of harmful organisms as a result of the application of alternate planting systems. In particular, under irrigation conditions, grain-cotton-vegetables, , cereals, corn, cotton-alfalfa, black herb-cereal, and herb-autumn wheat-corn rotation were used. Apply new technology developed by the Agricultural Research Institute of the Ministry of Agriculture with the use of "seed sow" and "zero-sowing" techniques to obtain the second crop from the same area in the same agricultural year and to spread it across large areas. seminars were held with farmers in the regions. At the same time, the technology of "zero tillage" (sowing with special grafting machinery without plowing the soil) was carried out on the repeated crop cultivation for two crops a year. Farmers were given detailed information about the benefits of these technologies by organizing demonstration sowings during field-based seminars and meetings with farmers in different regions each year.</p> <p>In recent years, it has been recommended that pomegranate irrigation water, which is a dry subtropical plant, has been advised to grow in lesser areas in accordance with domestic and foreign market demand. Expansion of valuable olive plantation in Absheron's arid and nutrient-poor soils has expanded.</p> <p>A number of activities have been conducted to promote and promote the widespread use of traditional seeding systems and other effective agro-crop cultivation and cultivation of traditional cultures, taking into account soil and climatic conditions.</p> <p>Thus, roundtables and discussions were held at the Aarhus Public Environmental Information Center with the participation of scientists, non-governmental organizations and the public in the field of protection of the hereditary system of agrobiological diversity and cultural plants.</p> <p>Scientifically grounded crop rotation scheme for scientifically grounded crop rotation by relevant agencies of ANAS for protection of fertility of the subtropical zone, increase of productivity in terms of food security and biodiversity conservation. in gray soils, in the subtropical Guba-Khachmaz region, in alluvial</p>	MoA ANAS MENR	2017-2020
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		<p>meadows and forests, in the humid subtropical gray-yellow soils of the Lankaran region.</p> <p>Scientifically grounded crop rotation scheme for scientifically grounded crop rotation by relevant agencies of ANAS for protection of fertility of the subtropical zone, increase of productivity in terms of food security and biodiversity conservation. in gray soils, in the subtropical Guba-Khachmaz region, in alluvial meadows and forests, in the humid subtropical gray-yellow soils of the Lankaran region.</p> <p>One of the ways to preserve soil fertility is to apply scientifically based crop rotation schemes, taking into account soil and climatic conditions. In this context, in the dark-gray soils of the dry subtropical Absheron area, to maintain the fertility of irrigated land and increase productivity in the field of vegetable crops, six-seeded vegetable-fodder planting schemes: 1 year-old + green fodder barley; 2. clover biennial; Watermelon; 4. potatoes; 5. Garlic; 6. White-cabbage + tomato and five-sided vegetable planting scheme: 1. potatoes; 2. vegetable beans; Watermelon; 4. tomatoes; 5. Vegetable bean and 4-field vegetable fodder scheme in grass-gray soils of Shirvan plain: 1. clover; 2. clover biennial; Cucumber; 4. Tomato, six-seeded vegetable-feed planting scheme in alluvial meadow and forest soils of the subtropical Guba-Khachmaz region: 1. alfalfa + barley for green feed; 2. clover biennial; 3. onions; 4. cucumber; 5. White cabbage; 6. Barley for green fodder + tomato and 5-field cultivation of beans in the gray-yellow soils of the subtropical Lankaran region: 1. tomato; 2. white cabbage + corn for silage; 3. onions; 4. vegetable beans; 5. It has been proposed to plant vegetable beans.</p> <p>An integrated indicator of biological status of sub-tropical zone water-gray, gray-meadow, alluvial meadow-forest and glaic-yellow soils has been identified and biological evaluation has been carried out.</p> <p>The role of crop rotation in preserving and increasing the fertility of vegetables under irrigated land is based on biological indicators. In order to restore the fertility of these lands a comprehensive system of agromeliorative measures was developed and applied to farms.</p> <p>Studying factors affecting sustainable development of biodiversity, development of proposals for establishment of forest zones and artificial forests in anthropogenic soils, and molecular biochemical effects of drought, water scarcity</p>		
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6.3.2.2.	Development of pilot projects for the development of organic farming	<p>The United Nations Food and Agriculture Organization (FAO) and the Ministry of Agriculture have implemented a pilot project to promote environmentally friendly vegetable production in the country and create a market for environmentally clean product and obtain certified food products from it. In order to promote organic farming, the Institute of Genetic Resources of ANAS and Sheki Regional Science Center implemented the project "Development of an innovative package of agroecological models and agroecological development models in the north-west of Azerbaijan". Also, a state program for the development of organic farming has been developed and submitted. Currently, work is being carried out to improve the state program based on proposals from various government agencies.</p> <p>In 2017, the oldest apple method of herding and organic gardening in Sheki and Guba regions (frosted and covered areas), fruit drying systems ("Tanden" and "Room"), as well as fall plums and corn. method has been developed.</p> <p>The research work on the use of organic fertilizers in agriculture has been conducted under separate agricultural plants, covering different soil and climatic conditions of the country. The effect of Zagatala compost as an organic fertilizer on the productivity of winter wheat in the mineral fertilizer fund has been studied. Productivity N50 P25 K60 + 10 t / ha of organic fertilizer ("Benefits compost") compared to the applicable version of the fertilizer option, 31.05 t / ha (37.7%) was high.</p> <p>Organic cultivation practices in the field of research in order to develop the Absheron peninsula, "Absheron Bio-Technology" company in the corn and sunflower crops were 12 Version 3 repetitions.</p> <p>The composition of the Bio-Absheron compost consists of the following components: Manure - 20%, crop residues - 19%, agricultural products waste 10%, straw - 10%, dried water residue 15%, poultry 5%, broad leaf decoction 10%, non-lime 3%, EM -Preparate solution 5%, superphosphate 2%, ammonium sulfate 1%. Chemical composition of the compost Bio-Absheron: organic matter</p>	MoA ANAS MENR	2017-2020

		<p>45%, nitrogen 1.48%; phosphorus 1.6%; potassium is 1.7%. Carbon nitrogen ratio in compost is 18. The chemical composition of the Bio-Absheron biohumus fertilizer obtained by recycling Bio-Absheron compost: 41%, total nitrogen 3.7%, phosphorus. 2.6%, potassium 2%, humin 12.5%, pH 7.1, ash 32.8%, humidity 55%. Before the experiments were done, the soil was plowed deep with a tractor and 25 m² of land was divided into sections. Soil samples were taken to determine agrochemical characteristics. Soil sampling is carried out during the growing season.</p> <p>Research on biotechnological reproduction of Shirvanshah grape variety was carried out in the corresponding laboratories of ANAS, studied the parameters of natural inducers of cytokine for induction of morphogenesis in vitro, and the formation of artificial conditions of Shirvanshah microhalculin depending on different cultivation conditions.</p>		
6.3.2.3.	<p>Soil salinization and secondary salinization, and the areas affected by the species of trees and shrubs adapted to the creation of forests and artificial forests of proposals on the implementation of pilot projects, with the aim of returning to the land reclamation works in the circulation of planting</p>	<p>In 2017, the Ministry of Ecology and Natural Resources has done the work on planting, restoration and cultivation of greenery in the areas exposed to anthropogenic impact, including around the highways. In the Absheron Peninsula and other adjacent arid areas, as well as along the highways, 504,003 trees and bushes were planted, and the entire area was provided with a drip irrigation system.</p> <p>During this period, Zig-Heydar Aliyev Airport highway around 75 601 units, 18 200 units of various types of Bail slope, planted trees and bushes. 41 710 units in the Alat-Hajigabul section of the Baku-Gazakh highway, 143,227 units in the Alat-Salyan section of the Baku-Astara highway, 92349 units around the Baku-Shamakhi highway, and 88,470 units around the Baku-Guba highway. shrubs were planted. At the same time, 30 150 species of different fruit trees have been planted on 70 hectares of the forest fund for the construction of agro-forest areas. In 2017, 300,000 pieces of olive trees, 1,100,000 mulberries, 110,000 pomegranates, 85,000 almonds and 10,000 figs of saplings were cultivated as standard planting material for new gardens. In addition, the plants were given 874 tons of organic fertilizer, 60.03 tons of mineral fertilizers, 24,630 meters of irrigation lines were laid on the territories of the greening departments, 3,670,4040 seedlings were grown, 4,131 kg of seeds of trees and shrubs, including 1023 kg of almonds, 110 kg of apricots, 121 kg of peaches, 12 kg of innards, 140 kg of other nuts, 2075 kg of olives, 61 kg of pine nuts, 29 kg of</p>	<p>AMWM OJSC MoA MENR ANAS</p>	2017-2020

		<p>cypress, 10 kg of application weight, 25 kg of oleander seeds. The planting material grown in previous years has been used in 460,510 cultivation units and for the construction of agro-forest areas. So far, 2,797,720 units, including 1,301,480 units, remain standard wool and weaver. 821,190 packs and ribbons made from planting material grown.</p> <p>In recent years, after refining arid lands and low-quality soils, large-scale greening projects based on modern techniques have been implemented, 5 386,196 trees have been planted on 4,438 hectares, and nearly 11,000 kilometers of modern drip irrigation systems have been implemented.</p> <p>Azerbaijan Amelioration and Water Management OJSC is planning to carry out repair works on the second and third level household irrigation and collector drainage networks on 74,439 hectares covering 52,600 farms in the eroded area. It is planned to repair 39,849 hectares in Yevlakh region (143,952 km with installations), irrigation canals on 34590 hectares in Agdash region (730,941 km with installations), drainage network (226,485 km with installations).</p> <p>Comprehensive studies have been conducted to study the pr It has been established that the saline soils and salinization processes are present in areas where the collector-drainage and irrigation systems are inadequate in the Mil, Shirvan, Mugan and Salyan plains, and in some areas saline soils are present. ocesses of salinization, salinization and secondary salinization in soils.</p> <p>As a result of these measures in the lands belonging to the Minbashi village municipality of Sabirabad and Alpout village of Goychay district, the water-physical properties of the land were relatively improved and yields increased by 10-15%.</p> <p>In order to create artificial forests in the Karrar base of the Institute of Botany of ANAS, a pilot project has been launched at the expense of planting more than 300 saplings of Adam tree (<i>Paulownia tomentosa</i>). The pilot project to identify the potential of climate-adaptation of soil-plant relationships in clay and saline soils of the Middle Kura-Araz lowland has been continued. The effects of abiotic factors (salt, water scarcity, nutritional deficiencies) on the development and productivity of cinema, which were first studied in our country, along with other fodder plants, were determined by allometric relationships and abiotic stress levels.</p>		
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6.3.2.4.	Implementation of projects related to the use of organic fertilizers in the agricultural sector, including high mountain areas	<p>In our country, agricultural production and increase soil fertility restoration for the Kura River delta and Boyuk Shor lake bottom silt deposits, organic fertilizer production plant, as well as organic residues and municipal waste compost production and its agriculture on the application of "Aqrobiocotech" LLC's appeal of the Ecology and Natural Resources The State Expert Office has received positive feedback.</p> <p>During the reporting period, scientific and practical conferences and seminars were organized in Guba, Goychay and Gakh regions on the production of environmentally friendly agricultural products using organic fertilizers.</p> <p>Research activities that involve the use of organic fertilizers in agriculture have been conducted under separate agricultural crops, covering different soil and climatic conditions of the country.</p> <p>The effect of Zagatala compost as an organic fertilizer on the productivity of winter wheat in the mineral fertilizer fund has been studied. Productivity was 31.05 t / ha (37.7%) higher than the non-fertilized version of the N50 P25 K60 +10 t / ha organic fertilizer (Zagatala compost).</p> <p>In our country, agricultural production and increase soil fertility restoration for the Kura River delta and Boyuk Shor lake bottom silt deposits of organic fertilizer plant construction, as well as organic residues and municipal waste compost production and its agriculture on the application of "Aqrobiocotech" LLC's appeal The State Expertise</p>	KTN, ETSN, AMEA	2017-2020

		<p>Office of the MENR has received a positive review.</p> <p>During the reporting period, scientific and practical conferences and seminars were organized in Guba, Goychay and Gakh regions on the production of environmentally friendly agricultural products using organic fertilizers.</p> <p>Research activities that involve the use of organic fertilizers in agriculture have been conducted under separate agricultural crops, covering different soil and climatic conditions of the country. The effect of Zagatala compost as an organic fertilizer on the productivity of winter wheat in the mineral fertilizer fund has been studied</p>		
6.3.2.5.	Expanding the use of traditional plant species and animal breeds that are resistant to adverse environmental factors amid global climate change	<p>Climate change was initially implemented by the Ministry of Ecology and Natural Resources in connection with the implementation of subclause 7.1.1 “Climate change impact assessment on agriculture and the development of adequate adaptation plan” of the Strategic Roadmap for Agricultural Production and Processing in the Republic of Azerbaijan. The analysis of statistical data on the impact on the economy and the improvement of the database have already begun and at the same time, climate scenarios have been developed based on modern methods.</p> <p>At the next stage, it is necessary to identify agricultural problems in different economic zones based on climate scenarios, to assess the sensitivity of agricultural sectors to the economic zones and to develop an adequate adaptation plan based on the results of this assessment. At this stage, relevant working groups in the agricultural sector, including the Ministry of Agriculture, should be set up to carry out the planned activities and assessments for each region based on the prepared climate scenarios. Climate scenarios for this work have been submitted to the Cabinet of Ministers.</p> <p>Both the traditional and new, scientifically proven ways to mitigate and eliminate the impact of the problem posed to Azerbaijan's agrarian science and demand for food security in the context of global climate change have been explored.</p> <p>In 2017, the country will be able to create and maintain a comprehensive, high-yield and high-quality grain crop that will provide drought, salt, high temperatures, waterfalls, diseases, and pests, according to various agro-economic conditions in the country. A variety of local and foreign materials have been used to create a pyramid (a large number of genes).</p> <p>The research will continue in different cultivation conditions to assess the adaptiveness of perspective lines acquired on the basis of local and embedded samples.</p> <p>Given the great need for improving the productivity and adaptation to the changing gene environment of the currently used local gene pool in relation to population growth, their demand and global climate variability, the national gene pool is the oldest and most widely used biodiversity in rural areas. their wild ancestors have been used to reproduce the traits and quality of native varieties and cross-breeding for selection of new varieties,</p>	AMEA, KTN, ETSN	2017-2020

		<p>and new hybrids have been created.</p> <p>Positive genes with known genetically resistant genes (yellow and blueberries, etc.) that are widely used in grain crops and severely damaging to crop yields to protect local wheat varieties and increase disease and pest resistance. different hybrid combinations were used to hybridize selected biological samples.</p> <p>In addition, 10 perspective lines were selected at the Tartar Region Practice Station from hybrid offspring derived from wild ancestors - wild barley <i>Hordeum bulbosum</i> (onion barley) to increase local barley resistance to disease and pests.</p> <p>Adaptation of existing varieties to their existing environmental conditions to ensure maximum use of the genetic potential of productivity, compliance with agrotechnical rules, etc. The importance of such factors and the need for water from the germination of seeds to full maturity, and the strongest impact of water scarcity on crop production, in recent years, in the lack of irrigation water during the growing season, with the establishment of accelerated seeding and moistening. A large amount of research has been carried out on primary material.</p> <p>24102 gene pools of cereals, grains, vegetables, melons, grapes, fodder, fruit and other plants were studied at the research institutes included in the Agrarian Science and Information Center's system in 2017; and specimens and hybrids of valuable economic characteristics were identified</p> <p>The Institute of Genetic Resources of ANAS enriched the collections of cultural plants and their ancestors through hybridization and study in various soil-climatic conditions, conducting expeditions across the country. Local varieties of branded plants and their wild ancestors, which are important for agricultural production in terms of food security, are a priority.</p> <p>After searching for private farms, the seeds of the ancient, folk breeding varieties and forms of the Azerbaijani brand plants are stored in the National Genbank, cultivated and researched in the gene pools of the Scientific-Research Bases and Stations. Significant collections and genetic resources have been created in recent years in the areas of biotic and abiotic environment resistance, potential productivity, and body quality and have been transferred to the National Genbank. As a result of searches throughout the country, 43 new samples (7 apples, 5 pears, 1 pistachio, 1 fig, 1 pomegranate, 4 pomegranate, 9 cloves, 14 grapes and 1 strawberry) were discovered in order to enrich the collection of fruit crops of ANAS. ampelographic descriptions are given. The collection of the Institute includes 1 innab, 2 pomegranates, 39 grapes and 1 strawberry specimen.</p> <p>Some varieties (156) and forms (103) of fruit crops grown in the gene pool collections of ANAS were investigated, 113 of which were compared to species and 52 species were compared with biological characteristics and economic indicators. 1 fig, 1 innab and 4</p>		
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		<p>grape varieties were delivered to the State Commission for Plant Registration and Seed Control.</p> <p>Extensive research has been carried out in the relevant scientific research institutes of ANAS to identify and create traditional plant varieties that are resistant to adverse environmental factors amid global climate change. Wheat genotypes collected from the Genbank of the Agricultural Institute were grown under drought and salt stress, and they contained photosynthetic and metabolic enzymes (phosphoenolpyruvate carboxylase; Reductase), the photochemical activity of FS2 in chloroplasts, the morphometric and fluorescence parameters were determined, and the corresponding loci of the gene, which is an indicator of stress resistance, have been studied.</p> <p>In recent years, new soft wheat varieties of Leila, Start, South, Diamond and Khamsa provided by the Institute of Genetic Resources of the National Academy of Sciences of Azerbaijan was highly successful in the State Variety Testing Service that submitted to the State Service for Registration of Plant Varieties and Seed Control under the Ministry of Agriculture of the Republic of Azerbaijan. Soft wheat varieties of Maya, Korifey-88 and Alliance was created in the Institute of Genetic Resources of ANAS, which can compete with soft wheat varieties for their productivity and grain quality. The new varieties are short and medium-sized, and meet the requirements of irrigation agriculture in terms of productivity and grain quality. Three-year researches have shown that the productivity of solid wheat varieties in the Karabakh irrigation condition is not different from the soft wheat varieties in the region. The following research work was carried out to develop and implement breeding programs towards creating new, modern adaptive varieties by using ancient, native breeding varieties and wild ancestors. Plant gen bank from the modern selection varieties of soft wheat was implemented in the experience territories of Absheron Scientific Research Source of Genetic Resources Institute, Gobustan Regional Experimental Station (RES) of the Agricultural Scientific Research Institute (ASRI) and Sheki Regional Science and Innovation Center. Plant genetic bank from the modern selection varieties of solid wheat was implemented in Absheron Scientific Research Source of Genetic Resources Institute and Tartar Regional Experimental Station of the Agricultural Scientific Research Institute.</p> <p>The collection of the Institute of Genetic Resources of ANAS is enriched with 1 new Iranian almond variety and 3 strawberry varieties. As a result of searches, 4 varieties (pear), 8 cultural (3 local fig forms, 2 new olive forms, 2 strawberries and 1 raspberry form) and 21 wild samples (13 sea buckthorn and 8 grapes) addresses were identified, and pomological and ampelographic features and indicators were described in the Republic in order to enrich the Institute's collection of fruit plants.</p> <p>Some varieties (109) and forms (125) of fruit plants, grown in the collections of the</p>		
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		<p>Institute's gene pool, have been studied and the biological characteristics and economic indicators of 85 species and 78 forms were compared and evaluated.</p> <p>It is planned to provide the State Service for Registration of Plant Varieties and Seed Control under the Ministry of Agriculture of the Republic of Azerbaijan with 1 fig, 4 pistachios and 4 grape forms.</p> <p>On this item, screening of drought and saline-resistant wheat genotypes (from wheat Genotype, lines and varieties collected at GENBANK at ANAS) is implemented based on morphophysiological, biochemical, biophysical, molecular, cell biotechnology, proteomics parameters and selected persistent genotypes are recommended for use in breeding programs and by farmers.</p>		
6.3.3. Improvement of the status of rare and endangered species of the flora and fauna in the Republic of Azerbaijan as a result of sustainable use and protection until 2020				
6.3.3.1.	<p>Improvement of measures for the protection of endangered species for the effective protection of rare and endangered species of plants and animals.</p>	<p>The natural habitat of leopards has been clearly defined as a result of efforts to restore leopard populations in the South Caucasus. Measures on creating and expanding the specially protected areas, strengthening their potential and raising awareness of the local population were implemented in the framework of leopards' protection strategy. Currently, the activities are underway by the Ministry of Ecology and Natural Resources with the support of IDEA and WWF.</p> <p>In recent years, the number of leopards has increased in the South Caucasus as a result of efforts to protect leopard populations and 7 leopards were recorded in Zangazur National Park and 3 leopards in Hirkan National Park by using advanced technologies. Public awareness was carried out among the residents of residential areas close to the habitat of leopards in 2017.</p> <p>The more 8 gazelles were reintroduced to the Aghgol National Park in 2017 in the framework of the Project of "Protection, reintroduction and restoration of historical habitats of gazelles within the territory of the Republic of Azerbaijan" accomplished by Heydar Aliyev Foundation and the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the World Wildlife Fund. The number of gazelles reintroduced to their historical populated areas was increased to 179 during the last period.</p> <p>The reintroduction of European bison to the wild life of our country is underway since the end of 2012. According to the Agreement signed in this field between the Shahdag National Park and IDEA Public Union, 305 hectares allocated in Shahdag National Park's administrative area of Ismayilli region for restoration and reintroduction of endangered bisons and increasing other wild animals for the scientific purposes.</p>	<p>MENR, ANAS, MoA</p>	<p>2017-2020</p>

		<p>Regular monitoring has been carried out to identify new habitats of rare and endangered plant species and the current status of their population is being investigated.</p> <p>At the same time, the efforts on the collection of seeds for the ex-situ protection of wild species of economically important species was underway.</p> <p>At present, the seeds of 28 plant species that are included in the Red Book of Azerbaijan and need protection is protected in the Seed Bank of the Institute of Botany of ANAS. 61 family 217 genus, 491 species of a total of 12989 samples is being stored in the Central Database of ANAS Institute of Genetic Resources. 3225 scientific selection varieties, 631 varieties of ancient selection, 2403 research materials and seeds of 7851 plants with different biological status of 1096 wild plants are being stored in the medium-term camera. 4167 of these samples are grains, 1241 are beans, 344 are fodder, 669 are vegetables, 971 are technical, 375 are medicines, 84 are fruit and other plants. Currently, about 1700 varieties and forms of fruit, berry and grape plants are stored in ex situ condition and studied in the field collections of the Institute of Genetic Resources of ANAS. 356 varieties and forms of subtropical fruit plants and 340 varieties of fruits and grapes are cultivated and stored in the gene pool of the Absheron scientific research base. The brand species of Azerbaijan are being protected in the national reserves and sanctuaries adapted to local conditions for thousands of years and within the range of natural distribution of endangered species. A live collection of silkworm (<i>Bombyx mori</i>) gene pool was created in the 50s of the last century at the Azerbaijan Scientific Research Institute of Silkworms and has been saved up to date. Of course, the sex composition of the collection has changed over the past period, a number of breeds without perspectives have been removed from the collection and new breeds have been included. Currently, there are 82 local silkworm breeds, including 50 local and 32 foreign, in the gene pool of the Livestock Scientific Research Institute.</p> <p>Research work in the field of horse breeding, sheep breeding, goat breeding, poultry, and silkworming was continued at the Livestock Scientific Research Institute regarding the conservation and restoration of the gene pool in other fields of livestock:</p> <p>Application of breeding methods for the creation of highly productive “Mil-Karabakh” and “Absheron” sheep breeds in the Absheron region;</p> <p>The use of “Avasi” sire for the improvement of Bozakh sheep productivity and breeding quality;</p> <p>Organization of sheep feeding (Lazgi origin) by age groups with advanced technologies;</p> <p>Application of breeding methods for the restoration of Azerbaijan merinos Application of breeding methods to preserve the goat breeds gene pool;</p> <p>Development and application of biotechnological methods (hybridization) to enhance the genetic potential of local chicken populations and the Azerbaijan Adler breed;</p> <p>Strengthening the feed base of livestock and silkworm in Azerbaijan, protection of gene</p>		
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		<p>pool and increasing economic efficiency; Phase study of the mulberry plants gene pool and the creation of new productive varieties; Study of the bioecological features of mulberry silkworms with different origin, use and protection of its gene pool. Horse breeding farms were monitored and working horses were identified in Aghstafa Equestrian LLC and Aghdam Equestrian LLC for assessment and proper application of breeding methods of Garabagh and Dilbaz horse breeds. The natural habitat of leopards has been clearly defined as a result of efforts to restore leopard populations in the South Caucasus. Measures on creating and expanding the specially protected areas, strengthening their potential and raising awareness of the local population were implemented in the framework of leopards' protection strategy. Currently, the activities on this field are underway by the MENR with the support of IDEA Public Union and WWF. In recent years, the number of leopards has increased in the South Caucasus as a result of efforts to protect leopard populations and 13 leopards were recorded in Zangazur National Park and 5 leopards in Hirkan National Park by using advanced technologies. Public awareness was carried out among the residents of residential areas close to the habitat of leopards in 2018.</p> <p>The reintroduction of European bison to the wild life of our country is underway since the end of 2012. According to the Agreement signed in this field between the Shahdag National Park and IDEA Public Union, 305 hectares allocated in Shahdag National Park's administrative area of Ismayilli region for restoration and reintroduction of endangered bisons and increasing other wild animals for the scientific purposes. The reintroduction of 20 bisons to our country is planned for 2019.</p>		
6.3.3.2.	<p>Research of habitat fragmentation and restoration of important habitats for the conservation of endangered animal species included in the current edition of the "Red Book"</p>	<p>The natural habitat of leopards has been clearly defined as a result of efforts to restore leopard populations in the South Caucasus. Measures on creating and expanding the specially protected areas, strengthening their potential and raising awareness of the local population were implemented in the framework of leopards' protection strategy. Currently, the activities are going on by the Ministry of Ecology and Natural Resources with the support of IDEA and WWF. In recent years, the number of leopards has increased in the South Caucasus as a result of efforts to protect leopard populations and 7 leopards were recorded in Zangazur National Park and 3 leopards in Hirkan National Park by using advanced technologies. Public awareness was carried out among the residents of residential areas close to the habitat of leopards in 2017. The collection of materials on organized scientific expeditions along with public awareness have been carried out in this area among the local population, and this work</p>	ANAS, MENR	2017-2020

		<p>is being continued on a regular basis for more detailed information on the fragmentation of habitat of endangered species listed in the Red Book. The opportunities are being explored on defining the potential habitats of species, migrating species to historical areas, and restoring populations.</p> <p>Studies are underway to develop a list of new invertebrate animal species for the next edition of the Red Book.</p> <p>The collection of materials on organized scientific expeditions along with public awareness have been carried out in this area among the local population, and this work is being continued on a regular basis for more detailed information on the fragmentation of habitat of endangered species listed in the Red Book. The opportunities are being explored on defining the potential habitats of species, migrating species to historical areas, and restoring populations.</p> <p>Studies are underway to develop a list of new invertebrate animal species for the next edition of the Red Book.</p> <p>Computer models of all potential habitats of the largest mammals included in the “Red Book” of the Republic of Azerbaijan and recommendations on those models are being prepared for future protection measures in those areas.</p> <p>The work on the list of new invertebrate species is underway for the third edition of the Red Book of the Republic of Azerbaijan. It is also planned to include the <i>Hirudo orientalis</i>-Eastern medicinal leech to the list.</p>		
6.3.3.3.	Development of measures for restoration of plant and animal species populations and implementation of reintroduction projects on the territory of the Republic	<p>The more 8 gazelles were reintroduced to the Aghgol National Park in 2017 in the framework of the Project of “Protection, reintroduction and restoration of historical habitats of gazelles within the territory of the Republic of Azerbaijan” accomplished by Heydar Aliyev Foundation and the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the World Wildlife Fund. The number of gazelles reintroduced to their historical populated areas was reached to 179 during the last period.</p> <p>Work on artificial and laboratory reproduction of medicinal leech is being continued in the direction of the restoration of endangered and historically existed species.</p> <p>Reproduction of one of the few rare birds - Caucasus and Zumrudu pheasant species has been investigated comparatively in room conditions and volyers for restoration of its population in 2017. Optimal options for the mass reproduction of both species were obtained as a result of the studies. Currently, 50 poultry (3-4 months) were obtained from pheasants as a result of the experiments and are fed in the room conditions.</p> <p>In addition, the “Bison reintroduction program” was launched within the reintroduction projects supported by the MENR. Initially, a temporary bison storage facility was built and commissioned in August 2017 in Buynuz village of Ismayilli region with the support of IDEA. Negotiations were held with international experts to start bison reintroduction and</p>	ANAS, MENR	2017-2018

		<p>details of bison delivery were agreed. Bison delivery to Azerbaijan is planned in the first half of the next year.</p> <p>Researchs have been carried out on the reproduction of Shirvanshah grape varieties by biotechnological methods in the Plant Biotechnology laboratory of ANAS, concentration parameters of cytokine natural inducers were studied for obtaining induction of morphogenesis in in-vitro condition, features of morphogenesis are defined during the microclonal reproduction of Shirvanshah grapes grown under artificial conditions and different cultivation conditions have been investigated depending on the trophic factors of the hormonal and nutritional environment. The studied grape variety has been found to have a high rate of infection against viral pathogens.</p> <p>The collection was created from the varieties of <i>Iris acutiloba</i>, <i>Iris annae</i>, <i>Iris grosshame</i>, <i>Iris musulmanica</i>, <i>Tulipajulia</i>, <i>Tulipa Schmidtii</i>, <i>Crocus caspica</i>, <i>Galanthuselwesii</i>, <i>Doctylorhiza flavescens</i>, <i>Orchis purpurea</i>, <i>Orchis fragrans</i>, <i>Merendera candidissia</i>, <i>Thymus caucasica</i> and etc. in the Central Botanical Garden by collecting from natural areas and artificial reproduction methods have been developed for the restoration of the population of endangered plant species in the country.</p> <p>In addition, measures on establishment of sanctuaries, natural restoration of species on the bases of reintroduction are planned in Absheron.</p> <p>Some rare and endangered species of plants such as <i>Galanthus caucasicus</i>, <i>Iridodictum reticulatum</i>, <i>Ophrys caucasica</i>, <i>Orchis purpurea</i>, <i>Rosa azerbaijanica</i> are kept in the Central Botanical Garden of the ANAS for the purpose of introduction.</p> <p>The research has been done to study and restore populations of rare and endangered plant species in 2018. Employees of the Institute of Genetic Resources have investigated important food and agricultural crops (feed, fruit and berries and medicines) in Lankaran, Lerik and Astara regions. The subject of the research was an important feed, food (fruit - berry) and medicinal plants. 17 seed samples and 169 herb copies for 14 species of wild ancestors of food and agricultural oriented (feed, fruit and berries and medicines) cultural plants were collected and transferred to the National Genbank and Herb Foundation with the expeditions to the southern region of Azerbaijan. Natural resource of wild quince species (<i>Cydonia oblonga</i> Mill.) have been revealed and biological productivity data was collected. As a result of the research, 3 rare and endangered species (<i>Trifolium fragiferum</i>, <i>Medicago talyschensis</i>, <i>Astragalus kosmaljanicus</i>) were identified and their status was determined by international environmental assessment methods. The status of their populations was assessed in nature.</p> <p>The method of microclonal reproduction has been developed for the restoration of the Shirvan-Shah grape population in the Plant Biotechnology Laboratory of the Institute of Genetic Resources in accordance with the paragraph on implementation of reintroduction projects and preparation of measures for restoration of populations of</p>		
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		<p>endangered plant and animal species on the territory of the country. Currently, the restoration of this grape variety is carried out using the Microclonal Reproduction Method. Plant materials that developed in nutrient environment is planted in fertile soil in natural conditions in the experience area of the Institute and further development is being kept under the control. Studies have been carried out in order to obtain optimal options for reproduction of Caucasian and Emerald pheasants, and the development dynamics of pheasants in cages have been recorded.</p> <p>Restoration of endangered plant species - <i>Iris annae</i>, <i>Iris eiegantissima</i>, <i>Fritillaria caucasica</i>, <i>Orchis provincialis</i>, <i>Doctylorhiza flavescens</i>, <i>Gentiana septemfida</i> is planned in the country. For the future reintroduction of <i>Lagodechiana</i>, <i>Thymus caucasicus</i> and etc. species, a collection from natural areas has been created in the Central Botanical Garden and artificial reproduction methods have been developed.</p> <p>In addition, the “Bison reintroduction program” was launched within the reintroduction projects supported by the MENR. Initially, a temporary bison storage facility was built and commissioned in Buynuz village of Ismayilli region with the support of IDEA. Negotiations were held with international experts to start bison reintroduction and details of bison delivery were agreed. Bison delivery to Azerbaijan is planned in the first half of the next year.</p> <p>Some rare and endangered species of plants such as <i>Galanthus caucasicus</i>, <i>Iridodictum reticulatum</i>, <i>Ophrys caucasica</i>, <i>Orchis purpurea</i>, <i>Rosa azerbaijanica</i> are kept in the Central Botanical Garden of the ANAS for the purpose of introduction.</p>		
6.4. Creation of effectively managed specially protected natural areas and expansion of the existing network				
6.4.1. Expansion of the specially protected natural areas network in the arid and coastal areas by 2020, by using representative ecosystems and other effective mechanisms				
6.4.1.	Expansion of specially protected natural areas in the Azerbaijani sector of the Caspian Sea and onshore areas	Construction of an administrative building of the Gizilaghaj National Park (with a total area of 300 m ²) has been completed and provided with the necessary equipment for the purpose of creation of the Gizilaghaj National Park by expanding the territory of the Gizilaghaj State Reserve and put into operation by the staff of the reserve. (Developed with the financial support of the United Nations Development Program (UNDP) and approved by the Cabinet of Ministers Decree No205/dated 07.07.2014 and based on the project document on “Improving the management of coastal ecological systems within specially protected natural areas of Azerbaijan” between the Government of the Republic	MENR, LEA	2017-2020

	<p>of Azerbaijan and the United Nations Development Program). samur</p> <p>Relevant measures were taken with foreign experts to establish the first biosphere reserve in the history of the country in Zagatala-Balakan region, a preliminary evaluation document was prepared and a Protocol of Intent was signed. The financing agreement and a special agreement for the project on "Support to the Protected Areas of the Republic of Azerbaijan, Zagatala-Balakan Region" were signed between Azerbaijan and Germany on September 7, 2016. An expert appointed by the German Development Bank visited to Azerbaijan on July 2017 in order to get acquainted with the area for the purpose of the tender and evaluation of the project and relevant tender documents are currently being reviewed by the MENR.</p> <p>Relevant project documents have been developed with the financial support of UNDP in 2014 to expand the area of the Gizilaghaj State Nature Reserve and to create the Gizilaghaj National Park. The project document on "Improving the management of the coastal ecological systems within specially protected natural areas of Azerbaijan" between the Government of the Republic of Azerbaijan and the United Nations Development Program was approved by the Decree of the Cabinet of Ministers (No205/dated 07.07.2014).</p> <p>Relevant work has been implemented to expand the infrastructure of the national park and to purchase the equipment, new administrative buildings and security posts were established and appropriate equipments provided in the framework of the project on "Establishment of the Gizilaghaj National Park" implemented by the UNDP. In addition, appropriate work has been done to demarcate the borders of the national park and establish access-control infrastructure, strengthen the logistics and protection facilities, and improve the protection and control capabilities of the national park staff. Activities on the development of the financial and accounting program, training for the staff, support for the monitoring activities in accordance with the monitoring ecosystem plan and the establishment of the Tourist Information Center for the implementation of tourism activities have been implemented within the project.</p> <p>Gizilaghaj National Park of the Republic of Azerbaijan established by the order (dated 26.09.2018 / №512) of the President of the Republic of Azerbaijan on the basis of the Gizilaghaj State Nature Reserve (88360.0 hectares) in 99060.0 hectares' area (10390.89 hectares allocated from the lands of the Little Gizilaghaj State Nature Sanctuary and 309.11 hectares from the State Reserve Fund located in the administrative territory of Neftchala region).</p> <p>Great opportunities for tourism activities were opened and interesting tourism routes were developed with the creation of the national park.</p> <p>In addition, Cabinet of Ministers of the Republic of Azerbaijan was requested for approval of the Regulations of the National Park for the purpose of addressing issues</p>		
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6.4.2.	Improvement of management system of specially protected natural areas	<p>In connection with the implementation of subparagraph 1.4.2 of the Decree of the President of the Republic of Azerbaijan (No 166 dated May 15, 2014) on "Application of the Law of the Republic of Azerbaijan (April 4, 2014 of No. 924-IVQD) on Amendments to the Law of the Republic of Azerbaijan "on Specially Protected Natural Areas and Objects":</p> <ul style="list-style-type: none"> - "Sanitary Protection Zone of the Aghgol National Park of the Republic of Azerbaijan" approved by the Decree of the Cabinet of Ministers of the Republic of Azerbaijan (No 403 dated October 7, 2016) - "Sanitary Protection Zone of the Altiaghaj National Park of the Republic of Azerbaijan" approved by the Decree of the Cabinet of Ministers of the Republic of Azerbaijan (No 419 dated October 25, 2016) - "Sanitary Protection Zone of the Korchay State Nature Reserve of the Republic of Azerbaijan" approved by the Decree of the Cabinet of Ministers of the Republic of Azerbaijan (No 487 dated November 13, 2017) 	MENR	2017-2020

		<ul style="list-style-type: none"> - "Sanitary Protection Zone of the Eldar Shami State Nature Reserve of the Republic of Azerbaijan" approved by the Decree of the Cabinet of Ministers of the Republic of Azerbaijan (No 592 dated December 22, 2017) - "Sanitary Protection Zone of the Goygol National Park of the Republic of Azerbaijan" approved by the Decree of the Cabinet of Ministers of the Republic of Azerbaijan (dated March 6, 2019) <p>Preliminary approval and mapping of other specially protected areas (Shirvan, Hirkan and Samur-Yalama national parks, Shirvan, Turyanchay, Garayazi, Zagatala and Ilisu state nature reserves) is underway.</p>		
6.4.3.	Developing Emerald Sites within the European Neighborhood Policy	<p>According to the Order of the President of the Republic of Azerbaijan (No 384, dated September 14, 2004) Emerald Network Pilot Project signed between MENR and the Secretariat of the European Council is implemented since 2009. Systematic information on 17 Emerald Sites is reflected in GIS maps and placed in an electronic database by the Working Group created by the MENR. Defined "Emerald Sites" has been approved by the relevant resolution of the Berne Convention. The information on mentioned sites is being updated according to the Terms of Reference for 2018.</p>	MENR ANAS	2017-2019
6.5. Reduction of adverse impacts on biodiversity and sustainable use of biodiversity				
6.5.1. Eliminate adverse impacts and threats to biodiversity by 2020 and bring environmental status to a level that will ensure biodiversity sustainability				
6.5.1.1	To assess an existing and potential adverse impacts on biodiversity-rich areas, and develop an Action Plan to prevent or minimize these impacts	<p>Three (3) sensitive coastal and marine areas are identified in terms of biodiversity in the Azerbaijani sector of the Caspian Sea within the framework of the program on "Ecological or Biologically Important Maritime Areas" of the UN Convention on Biological Diversity: The Gizilaghaj bay, the area around the Kura delta, and the Samur-Yalama marine aquatoria. The establishment of reserves in these offshore areas was proposed for the first time in the country according to the project proposals based on ecosystem approach. The rich marine biodiversity in these aquatorias on the projects has been assessed, detailed scientific information on fish, birds and mammals has been provided, and an action plan for the conservation of flora and fauna has been developed. A regional seminar on ecologically or biologically significant marine areas was held on</p>	MENR, ANAS, MoA	2017-2020

		<p>24-29 April 2017 in Baku, with the support of UN Convention on Biological Diversity and within the framework of cooperation with the Secretariat of the Commission on the Protection of the Black Sea Against Pollution and the Secretariat of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea. The representatives from the Republic of Bulgaria, Georgia, the Islamic Republic of Iran, the Republic of Kazakhstan, Romania, the Russian Federation, the Republic of Turkey, Turkmenistan and Ukraine, as well as international organizations, relevant government agencies and non-governmental organizations attended the workshop.</p> <p>The 1st Intergovernmental Session of the Commission for Conservation, Rational Use and Management of Water Resources of the Caspian Sea held on November 21-23, 2017 in Baku. The first meeting of the Commission was held with the participation of delegations from five Caspian countries - the Republic of Azerbaijan, the Islamic Republic of Iran, the Republic of Kazakhstan, the Russian Federation and Turkmenistan.</p> <p>The migration and habitats of large mammalian species have been identified as an indicator within the Ecocorridor project through space research methods. The areas with the strongest anthropogenic impacts on animal migration routes have been identified.</p> <p>It is planned to develop an appropriate action plan together with the MENR and ANAS on grouping of new, rare tree-shrub species adapted to local conditions by economic significance and establishing new forest strips in the country.</p> <p>The project on monitoring of Azerbaijan coastal of Caspian Sea was jointly developed with Institute of Geology and Geophysics of ANAS. Sampling of sediment and water for chemical impact study and conducting physiological, histological and genotoxicological analysis of goby and atherin fish as bioindicators in the same areas to determine biological status are considered in the project. The materials will be collected at least from 10 locations along the Caspian coastal from Nabran to Astar. According to the results it is planned to prepare an ecological map of the Caspian coastal of Azerbaijan. Based on the results of experiments to protect biodiversity in the Caspian region of Azerbaijan the workshops will be held to attract the attention of local population, fishermen and local self-government bodies, the planned work will give the opportunity to preserve the unique gene pool of fish, save the gene pool of sturgeons, optimize the operation of their breeding plants, and protect the biodiversity of the Caspian Sea. A project on the "Study of the impact of new generation insecticides used in agriculture against insects on fishery? morpho-physiological performance of large and small horned animals" is prepared and will be submitted for participation in the next grant competition.</p>		
6.5.1.2.	Development of adaptation programs and assessment of the	The analysis of statistical data on the climate change impact on agriculture and the improvement of the database have been initiated and climate scenarios have been developed based on modern methods by the Ministry of Ecology and Natural Resources	MENR, ANAS, MoA	2017-2020

	<p>impact of climate change on biodiversity in areas sensitive to climate change (wetlands, high-mountainous areas, coastal lines of the Caspian Sea, etc.)</p>	<p>in connection with the implementation of subparagraph 7.1.1 on "Assessment of the impact of climate change on agriculture and the development of an adequate adaptation plan" of the Action Plan on "Strategic Roadmap on Production and Processing of Agricultural Products in the Republic of Azerbaijan".</p> <p>Agricultural problems in different economic zones should be identified, sensitivity rates of agricultural sectors on economic zones should be evaluated and an adequate adaptation plan according to the results of this assessment should be developed on the basis of climate scenarios prepared in the next phase. Appropriate working groups on agricultural sectors should be established by the experts from the Ministry of Agriculture and assessments should be made for individual regions based on the developed climate scenarios in order to continue the implementation of measures planned in this phase. Developed climate scenarios for this work were submitted to the Cabinet of Ministers.</p> <p>Tested (traditional), new and scientifically proven ways were investigated and applied to reduce and eliminate the impact of the problem in accordance with the requirements and objectives of Azerbaijan's agrarian science within the ensuring food security in the context of global climate change.</p> <p>Various local and foreign materials were used to create a gene pyramid on selection program and to create a high-quality grain crops in accordance with various agro-economic conditions of country in 2017.</p> <p>Researches on mathematical modeling of anthropogenic contamination were carried out in the littoral zone of the Absheron coast of the Caspian Sea based on the results of biotestation to assess the impact of climate change on biodiversity.</p> <p>Proposals for the development of appropriate projects for natural reproduction of species are being prepared in areas where species decline and impact of climate change on biodiversity is observed as a result of monitoring.</p> <p>The analysis of statistical data on the climate change impact on agriculture and the improvement of the database have been initiated and climate scenarios have been developed based on the modern methods by the Ministry of Ecology and Natural Resources in connection with the implementation of subparagraph 7.1.1 on "Assessment of the impact of climate change on agriculture and the development of an adequate adaptation plan" of the Action Plan on "Strategic Roadmap on Production and Processing of Agricultural Products in the Republic of Azerbaijan".</p> <p>Agricultural problems in different economic zones should be identified, sensitivity rates of agricultural sectors on economic zones should be evaluated and an adequate adaptation plan according to the results of this assessment should be developed on the basis of climate scenarios prepared in the next phase. Appropriate working groups on agricultural sectors should be established by the experts from the Ministry of Agriculture and assessments should be made for individual regions based on the developed climate</p>		
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		<p>scenarios in order to continue the implementation of measures planned in this phase. Developed climate scenarios for this work were submitted to the Cabinet of Ministers. Tested (traditional), new and scientifically proven ways were investigated and applied to reduce and eliminate the impact of the problem in accordance with the requirements and objectives of Azerbaijan's agrarian science within the ensuring food security in the context of global climate change.</p> <p>Proposals for the development of appropriate projects for natural reproduction of species are being prepared in areas where species decline and impact of climate change on biodiversity is observed as a result of monitoring.</p> <p>Proposals for the development of appropriate projects for natural reproduction of species are being prepared in areas where species decline and impact of climate change on biodiversity is observed as a result of monitoring.</p>		
6.5.1.3.	<p>Creation of an electronic database on number and populations of invasive species, assessment of the current status of invasive species of flora and fauna, determination of distribution routes in marine, dry, wetland ecosystems and control mechanisms to prevent entry into the country</p>	<p>Different aspects of the biology and ecology of the Caspian Sea (differs from the watersheds inhabited by the Mnemiopsis leid with hydrological, hydrochemical and temperature regimes) were studied as a result of research conducted by the Azerbaijan Scientific Research Fisheries Institute under the MENR over the past 20 years.</p> <p>Monitoring on distribution and number of Mnemiopsis leidyi controls both itself and the dynamics of the populations affected by this species.</p> <p>The effect of Mnemiopsis leidyi on marine biota is predatory and it causes changes in the food chains of pelagial and marine fish. The reserve of the anchovy sprat which is the main object of fishing and is fed by plankton organisms, has been severely damaged by the effects of mnemiopsis in the Caspian Sea. The changes in the fish ration living in the seabed were noted as a result of the effects of mnemiopsis eating planktonic larvae of the seabed invertebrates fed with sturgeon, huso, starry sturgeon, Caspian Kutum, sprat, and other valuable fish. Negative impacts of mnemiopsis on marine biodiversity stabilized in the Middle Caspian, however increased in the southern Caspian due to the increase in the average annual sea temperature regarding the climate changes.</p> <p>The introduction of Beroe Ovata (natural enemy of mnemiopsis) is being investigated in Caspian Sea Water Biological Resources Commission (established by the Caspian littoral states) in order to reduce the negative impact of Mnemiopsis leidy on marine ecosystems in recent years.</p> <p>The research on the mathematical modeling of anthropogenic contamination of these areas are being conducted based on the detection of structural changes in plankton units and the results of biotestation as a result of anthropogenic impacts in the littoral zone of the Absheron coast of the Caspian Sea (the most polluted aquatic area) to assess the impact of climate change on biodiversity.</p> <p>Extensive research is being carried out on plant pests and their natural enemies in cotton, pomegranate plantations and fruit orchards in order to assess the current status</p>	ANAS, MENR, MoA	2017-2020

		<p>of invasive species of the fauna at the Applied Zoology Center of ANAS. The bioecological features of the collected pests are being investigated and the species composition of their entomophagies is being specified. The scientific bases of mass reproduction of <i>Habrobracon hebetor</i> entomophagy were developed in laboratory conditions and several generations of entomophagus were obtained.</p> <p>Diseases and pests of plants imported from foreign countries are checked with modern equipment in the Plant Protection Laboratory of the Dendrology Institute; The new pests were discovered in our Republic and fighting methods against them are being selected in recent years.</p> <p>The research in the direction of the inventory of invasive plant species grown in different ecosystems was launched. Specifications are being developed to establish an electronic database of invasive plants. Regular monitoring is carried out to identify active species of invasive plants and their distribution centers.</p> <p>In addition, 54 species of Buprestidae, 5 semi-species of insect butterflies (Lepidoptera Geometridae), 47 species of 29 breeds, 12 species of needles (Insecta, Odonata), 4 species of moths (Arachnida, Opiliones) were included to the collection.</p> <p>15 family and 72 species from spiders (Arachnida: Araneae) and 2 family (Eriophyidae; Rhyncaphytopchtae), 12 breeds and 30 species from ticks were defined.</p> <p>17 species (<i>Aceria tulipae</i>, <i>A. malherbae</i>, <i>A. saalasi</i>, <i>A. medicaginis</i>, <i>A. absinthii</i>, <i>A. erinea</i>, <i>A. camponulae</i>, <i>Anthocoptes striatus</i>, <i>Vasates unquiculatus</i>, <i>Epitrimerus trilobus</i> and etc.) from ticks were defined for Azerbaijan fauna and 25 species from spiders were defined for the first time in the spider fauna of the mountainous Shirvan. The trophic relations of 19 species of striped bees (Hymenoptera, Apidae) have been investigated and the determination of pollen from plants collected from their feet was defined as well.</p> <p>Invasive hydrobionts come or are transported to the Caspian Sea by ballast water and transplantation (by introduction) of fish and other organisms with economic importance.</p> <p>At present, there are 16 species were registered in the plankton, 15 species in the periphery, 9 species in macrobentos, 5 species in ichthyofauna, and 4 invasive species of fish were registered in the inland waters of the Azerbaijani sector of the Caspian Sea. Other groups of hydrobionts are also more likely to be invasive. The work on their identification is underway.</p>		
6.5.1.4.	Estimation of damage caused by populations of invasive species of flora and fauna with an adverse environmental and economic impact and development of	<p>The introduction of the <i>Mnemiopsis leidyi</i> into the Caspian ecosystem has led to the decline of mesoplankton quantity, decrease of the intensity of planktonic species, and reduction in the number of <i>Clupeonella</i> fishes (feed on <i>Acipenseriformes</i>, <i>Salmoniformes</i> and <i>Clupeiformes</i>) in the Azerbaijani sector of the Sea. 3 invasive species (silver Prussian carp, Stone moroko and Korean sharpbelly) were registered in the Mingachevir Reservoir and 1 species (silver Prussian carp) was registered in the Takhtakorpu Reservoir. It has been defined that the specific weight of phytopathogens, among the mushrooms distributed</p>	ANAS, MENR	2017-2020

	measures to combat them	<p>in various biotopes of Azerbaijan, is sufficient and some diseases (rust, stain, sliding, smudging, floury dew) were determined on these species. It has been determined that the dissemination of most of the mentioned diseases is at a potential threat and the presence of unregistered mushrooms was also identified in the conducted researches among the creators of the observed diseases (xəstəliklərin törədiciləri).</p> <p>Proposals for assessing the damage caused by the invasive species (such as Ailanthus, qopartikan etc.) to the populations in the Republic and their inclusion to the “Black Book” are being developed.</p> <p>Silver Prussian carp (<i>Carassius auratus gibelio</i> Bloch, 1782), one of the three species in the Mingachevir reservoir, is now one of the most important fishery species and takes a special place in fishing. Other invasive species play an important role in the feeding of predatory fish.</p> <p>23 species of mesoplankton, 3 groups of invertebrate animal larva (combs, molluscs and crustaceans) and 11 species of fish were recorded in the Azerbaijani sector of the Middle Caspian. Besides invasive species found in Mesoplankton, other invasive species also play an important role in the marine food chain. The invasive species of fish were not recorded in the Azerbaijani sector of the Caspian Sea in the reporting year.</p>		
6.5.1.5.	Exploring and promoting the use of bioenergy from agricultural and domestic waste	<p>The relevant measures were held to promote the collection of methane gas from manure and use as renewable energy with the participation of livestock farms, as well as representatives of local executive authorities and agricultural departments in Yevlakh, Barda, Tartar, Fuzuli, Aghsu, Agdash, Sheki, Gabala, Sabirabad, Saatli, Imishli and Beylagan districts by the organization of MENR (In accordance with the subparagraph 7.2.2 on “Reduction of carbon dioxide emissions in the agricultural sector” of the Action Plan of the “Strategic Road Map for the Production and Processing of Agricultural Products in the Republic of Azerbaijan” (approved by the Order of the Republic of Azerbaijan, dated 06.12.2016 / No-1138)).</p> <p>Construction of 20 MW bioenergy stations is planned in the potential regions of the country in 2018-2020. The projects on Aghjabadi, Siyazan, Barda, Samukh, Absheron and Yalama Bioenergy Thermal Power Plants has been developed by the State Agency for Alternative and Renewable Energy. Due to the above-mentioned bio-energy projects, totally 15.3 mln. m³ of natural gas will be saved, and it will lead to a reduction of 57.86 thousand tons CO₂ emissions. It should be noted that the raw materials used in the projects are mainly made up of manure and plant residues formed in agriculture. Renewable energy generation from these types of wastes occurs at biomass installations due to fermentation, methane emissions and waste incineration. For this reason, the study of energy-generating facilities by separating methane from wastes has been started in the implementation of 20 MW bioenergy projects. As a result, it became clear</p>	ANAS, MENR, MoA, SAARE,	2017-2020

		<p>that methane excretion from bird manure should be carried out at a high temperatures and in indoor condition of the large livestock and poultry complexes in order to be an economically viable. Methane gas can also be obtained from the processing of rotten plants in crop farms. It is considered to be the main source of energy at bioenergy stations.</p> <p>In addition, work has been started to collect statistical data on methane gas emissions from livestock. The agency has developed a methodology for calculating the amount of wastes in the agricultural sector. According to the results of the analysis of this methodology, the annual reserve of plant origin (cotton and straw) is 2.5 million tons and the total amount of manure in the livestock complex is 25.8 million tons. The total energy potential of these wastes, which play a key role for bioenergy plants, is estimated at 280 and 600 MW, respectively, in livestock and crop production.</p> <p>The relevant measures were held to promote the collection of methane gas from manure and use as renewable energy with the participation of livestock farms, as well as representatives of local executive authorities and agricultural departments by the organization of MENR (In accordance with the subparagraph 7.2.2 on “Reduction of carbon dioxide emissions in the agricultural sector” of the Action Plan of the “Strategic Road Map for the Production and Processing of Agricultural Products in the Republic of Azerbaijan” (approved by the Order of the Republic of Azerbaijan, dated 06.12.2016 / No-1138)). Construction of 20 MW bioenergy stations is planned in the potential regions of the country in 2018-2020. The projects on Aghjabadi, Siyazan, Barda, Samukh, Absheron and Yalama Bioenergy Thermal Power Plants has been developed by the State Agency for Alternative and Renewable Energy.</p> <p>Mentioned subparagraph of this strategy outlines the possibilities for bioenergy generation from agricultural and domestic wastes and encourages the use of that energy. Electrical and thermal energy generation (by using biomass) prevents the use of wood. Provision of remote settlements (where gasification is technically and economically inefficient) with alternative sources plays an important role in the preservation of forest landscapes, according to Paragraph 4.1.5 of the Action Plan of the Strategic Road Map for the Development of Public Utilities in the Republic of Azerbaijan. The studies have been conducted on villages where gasification is not efficient, the map of the required energy amount for degree-day depending on climatic conditions was compiled and comparative analysis of the energy demand was carried out by using different energy sources by the SAARE.</p>		
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6.5.1.6.	Assessment of the potential for transition to a "green economy" for the protection of biodiversity and sustainable use of natural resources	Relevant workshops were held with the executive authorities and municipalities, and the appropriate recommendations were given to take relevant actions in the places regarding the initial assessment in order to assess the potential for transition to a "green economy" for the protection of biodiversity and sustainable use of natural resources.	MoA, MENR, LEA, municipal ities	2017-2019
6.5.1.7.	Extensive promotion of environmentally friendly agricultural production	<p>Trainings are regularly conducted by the Ministry of Agriculture and Agrarian Science and Information Advisory Center to educate and inform farmers on this direction. Thus, the Pilot project on "Development of organic agriculture and institutional capacity building in Azerbaijan" was implemented between the United Nations Food and Agriculture Organization (FAO) and Vegetable Scientific-Research Institute, as well as 3 workshops and 2 "Field Day" events were held for farmers for the cultivation of organic products and obtaining certified food products from them in the direction of promoting the production of environmentally friendly vegetable products in the country and to create its market.</p> <p>Scientific and practical workshop on "Ecological agriculture as a basis for sustainable development, protection of natural resources and environment" was held in the Vegetable Scientific-Research Institute on 25 October 2017 with the participation of farms and delegations from research institutes. In addition, two leaflets on "Cultivation of ecologically pure vegetables and melons", "Technology of cultivation of ecologically pure potatoes" were prepared.</p> <p>An experimental field of biological agriculture is established at the Vegetable Research Institute of the Agrarian Science and Information Advisory Centre in Absheron to implement the biological methods of agriculture, to obtain best rotation program for vegetables, and to demonstrate organic practices to the farmers. Training of inspectors based on "International organic standards" was organized on 20-24 November 2017 within the project on "GCP/AZE/006/TUR: Development of Organic Agriculture and Institutional Capacity in Azerbaijan" implemented by FAO and Ministry of Agriculture. Workshop based on international standards was held on the principles and practices of inspection of organic farming and specialists were provided with certification and accreditation information. The training was conducted by international inspection and certification experts with the participation of specialists from the Ministry of Agriculture of the Republic of Azerbaijan.</p> <p>An event on "Expansion and Promotion of Organic Pomegranate Products" was held on 24 November 2017 on the implementation of the Strategic Roadmap with the participation of farmers, processing facilities in Goychay region, as well as representatives of relevant ministries and agencies. Discussions on the current status of horticulture in the Republic, promotion of environmentally friendly production,</p>	MA, MENR, ANAS, SCSMP	2017-2020

		<p>preservation and development of gene pool of pomegranate varieties grown in environmentally friendly and natural conditions were held in the event. The research has begun in the lakes near the Mingachevir scientific-experimental laboratory of ANAS on the cultivation of organic Common carp, Grass carp and carp fishes, the study of bioecological features of pests of nuts (walnuts, hazelnuts, chestnuts), cereals, sugar beet, clover and potato plants and preparing the biological remedies against them in order to promote the production of organic agricultural products.</p> <p>Scientific principles of land use, ecological farming methods, as well as the assessment of the required organic relationships between ecological livestock and environmental farming were carried out based on a systematic approach in the eco-friendly agricultural production. The targeted models of organic agriculture have been developed through the MS Excell program after analysing the process of survey and statistical data with a dialectical approach to addressing the sociological problems of organic agriculture.</p> <p>The target groups consisting of farmers with an interest in producing organic agricultural products have been established and appropriate trainings have been organized for them in the Gabala, Oghuz, Sheki, Gakh, Zagatala and Balakan regions, in accordance with the Program of Regional Experience and Resource Center for Organic Agriculture.</p> <p>The research has begun in the lakes near the Mingachevir scientific-experimental laboratory of ANAS on the cultivation of organic Common carp, Grass carp and carp fishes , the study of bioecological features of pests of nuts (walnuts, hazelnuts, chestnuts), cereals, sugar beet, clover and potato plants and preparing the biological remedies against them in order to promote the production of organic agricultural products.</p> <p>An educational speech on cotton growing, weeding and beekeeping were made by the relevant institutes of ANAS in the mass media.</p> <p>According to the analysis and research in the field of organic agriculture in Azerbaijan:</p> <ul style="list-style-type: none"> - The soil-climatic conditions of Azerbaijan are very favorable for cultivation of agricultural crops (fruits, vegetables, grapes, maples, medicinal plants) with high environmental and biological value; - The soil with productivity potential and high self-cleaning capabilities ensures the high productivity of the mentioned plants; - The scientific and technical potential created in the country over the last 15 years can enable the production and processing of environmental agricultural products; - An agricultural experience and labor resources existed in the country can provide the sustainable agricultural production; - The close proximity of the environmental agricultural products to the European market is one of the important advantages of this program. 		
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		The aforementioned serious bases and the interest shown by family farms to the development of environmental agriculture could lead to a 2.5-fold increase in the production of environmentally friendly agricultural products.		
6.5.2. Sustainable use of natural resources and ecosystems related to biodiversity				
6.5.2.1.	Assessment of the modern ecological status of water bio-resources, study of the population dynamics of native species of fish, determination of hunting norms and development of aquaculture	<p>Major changes have been made as a result of the combined effects of a number of anthropogenic and natural factors (global climate change, sea level hesitation, environmental regulation of river flow, chemical and biological pollution, illegal fishing) in the unique ichthyofauna of the Caspian Sea and the Kura River starting from the middle of the 20th century. The decrease of the reserve and hunting of many valuable fish - sturgeon (Acipenseridae), salmon (Salmonidae), hatcheries (Clupeonella), carps (Cyprinidae) are being observed.</p> <p>Industrial fishing of carp fish in the Republic of Azerbaijan is carried out both on the Caspian Sea and on the Kura river. The highest rates of carp huntings were recorded in the country in the 1930s (28,5 thousand tons on average in 1931-1935). In the following years, their hunting numbers (both in the Caspian and in the sea waters of Azerbaijan) have decreased significantly. In recent years (2010-2016), carp hunting was hesitated between 60 and 85.9 tons in the Kura River and 102.3-155.5 tons in the Azerbaijan sector of the Caspian Sea. At present, carp hunting in the Azerbaijani sector of the Caspian Sea is growing.</p> <p>More than 20 species are registered in the industrial fishery hunting in the Kura River and in the Azerbaijani sector of the Caspian Sea. 8 species of fishery were caught in the Kura river in 2010-2016 and 9 species in the waters of the Caspian Sea in Azerbaijan (2 species - Carassius carassius and Carassius gibelio are noted as one species in statistics). Most of the hunted Cypriniformes in the Kura River are Common bream (Abramis brama), and the amount of hunting ranged from 39 to 71% in different years. Caspian kutum (Rutilus frisii kutum) is dominated in industrial fishery (40-84%). Pseudophoxinus (Rutilus caspicus) is in the second place on the carp hunting. The catch rate of this fish in the Kura River was 14-23%, and in the Caspian Sea was 12- 32%.</p> <p>In recent years there has been an increase in the number of Carassius, which are the invasive species for the republic's ichthyofauna. These fish contain 14.8 % of the Cypriniformes hunted in the Kura river in different years. Amount of Cyprinus carpio and Alburnus chalcoides varies from 1 to 12% in fishery hunting in the Kura River. The hunting amount of Cyprinus varies from 1 to 17% in fishery hunting in the Azerbaijani sector of the Caspian Sea. Due to its importance in marine fisheries, the following places are represented</p>	MENR, ANAS	2017-2020

		<p>by common bream and cyprinid (<i>Vimba vimba</i>). In industrial fishery, the numbers of asp (<i>Aspius aspius</i>) and carp (<i>Hypophthalmichthys</i>) are not very high. The impact of anthropogenic and natural factors has led to the degradation of the Caspian Sea ecosystem on the last decade. The decline in general fishing in the Caspian Sea is directly related to the decline of <i>Clupeonella</i> hunting. 80-85% of hunted fish in the Caspian Sea are <i>Clupeonella</i>. The reserve and hunting of <i>Clupeonella</i> has sharply decreased as a result of the falling <i>Mnemiopsis leidyi</i> from the Black Sea to the Caspian Sea with ballast waters at the end of XX century.</p> <p><i>Clupeonella</i> was the basis of industrial fishing in the Caspian Sea by 2001. 200-250 thousand tons of <i>Clupeonella</i> were regularly hunted by the Caspian states. <i>Clupeonella</i> hunting was based on the use of Anchovy sprat and Southern Caspian sprat (<i>Clupeonella grimmi</i>) for several decades. These 2 species totally contain the 99% of <i>Clupeonella</i> hunting. Hunting amount of simple <i>Clupeonella</i> was approximately 1% in the total <i>Clupeonella</i> hunting. Since 2000, <i>Clupeonella</i> hunting in Azerbaijan declined from 18520 tonnes to 316 tonnes (2016). At present, the first place in <i>Clupeonella</i> hunting is simple <i>Clupeonella</i> (80-85 %), second place is represented by Anchovy sprat (10-15%) and the third place is represented by Southern Caspian sprat (<i>Clupeonella grimmi</i>) (1-2 %).</p> <p>Hunting of Clupeidae fisheries are carried out in the southwestern part of the Caspian Sea. Clupeidae hunting varies from 24 to 152 tons in 2010-2016 and an increase in hunting is being observed. The <i>Liza</i> (Mugilidae) hunting on the Azerbaijani coast of the Caspian Sea increased from 3.4 tons to 157 tons over the last few years. It is possible to increase the overall hunting of <i>Liza</i> (Mugilidae) fish by using special hunting tools through intensification.</p> <p>The total hunting of sturgeon in the Caspian Sea has declined 30 times over the past 30 years (from 27 000 tons in 1980 to 0.6 thousand tons in 2010). The total hunting of sturgeon has declined from 70 tons to 2 tons during the 2000-2010 in Azerbaijan. Technical moratorium on hunting of sturgeon fishing was announced in the Caspian Sea since 2011 and hunting of sturgeons is only allowed for scientific research and fishery purposes.</p> <p>Measures on further legal and political framework of aquaculture, improvement of management infrastructure, application of innovative technologies based on international experience and science for aquaculture development are being implemented.</p> <p>Following measures have been carried out at the Institute of Physiology of ANAS regarding the research of the ecological and physiological features of the sturgeon breeding in the aquaculture condition and orientation of the obtained results to practice:</p> <ul style="list-style-type: none"> - Fish-biological researches on the reconstruction of the Kura experimental fishing plant were underway to maintain the purity of the fish species and to produce sales products from the fish species (sturgeon as well). 		
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		<p>successfully with the IDEA Public Union staff.</p> <p>Information regarding the Sustainable Development Goal 14. “Conserve and sustainably use the oceans, seas and marine resources for sustainable development” was prepared on the basis of researches conducted by Azerbaijan Scientific-Research Fishery Institute. This data was included in the “Voluntary Report on the First Steps of the Republic of Azerbaijan on the Implementation of the Sustainable Development Agenda until 2030”, according to the Order of the Cabinet of Ministers of the Republic of Azerbaijan (dated 28 April 2017, No. 17/1999-22).</p> <p>The “State Program for fishery development and efficient use of inland water basins in the Republic of Azerbaijan” will be developed for 2019-2023, for achievement of the strategic targets set out in the “Strategic Road Map for the Production and Processing of Agricultural Products in the Republic of Azerbaijan” (approved by the Order of President dated 06.12.2016, No-1138), for the creation of large intensive industrial fishing complexes, family and farming fisheries through the use of modern world experience in the republic, conservation and enhancement of biodiversity of the Caspian Sea through the use of advanced world experience and to apply the experience of various biotechnologies of intensive aquaculture, indoor water supply systems, and other intensive cage models for the cultivation of marine and biological resources of aquaculture.</p>		
6.5.2.2.	Development and implementation of measures for the development of hunting in terms of effective use of biodiversity	<p>The Department of Biological Diversity and Development of Specially Protected Natural Areas of MENR announces the hunting period every year from the end of May to the beginning of June in order to regulate the number of wild animals and birds on the territory of the Republic. The hunting norms and hunting periods of the objects are being developed and approved by the appropriate order.</p> <p>The biological characteristics of hunting objects, including the migration of animals, reproduction periods and other natural factors are taken into account while determining the hunting schedule. It is allowed to hunt them all year round in order to regulate the number of certain harmful species that have a significant impact on the number of existing populations of wild animals and birds. It is allowed to hunt only in hunting period, in determined dates and in relevant places appointed only for hunting. Prohibited places for hunting are as follows: territories adjacent to the battle-front zone, as well as the border zone, islands of Caspian Sea, settlements, near the city, specially protected nature areas (national parks and reserves).</p>	MENR, MCT	2017-2019

6.5.2.3.	Strengthening of control over illegal harvesting and sale of wild medicinal plants and ensuring their sustainable use	<p>The researches were conducted in Masalli and Jalilabad regions to study and restore the populations of endangered plant species of cultural plants in 2017. The research point was feed, food (fruit - berries) and medicinal plants. As a result of the research, 5 rare and endangered species of ancestors observed in the area, their status was determined by international environmental assessment methods and electronic maps were compiled based on the DIVA-GIS program. The status of their populations in the nature has been assessed and proposals for their protection have been developed. Seeds and herbarium materials for these species were collected. Planting collected seed material in the experimental field of ANAS, scattering obtained seed materials across the natural distribution areas of these species and their reintroduction is planned for this year. The collected species were evaluated on a 9-point scale prepared by the International Union for the Protection of the Environment and 2 species (<i>Trifolium subterraneum</i> L., <i>Trifolium hirtum</i> All.) were included to Endangered list, 1 species (<i>Trifolium angustifolium</i> L.) included to the Vulnerable list and 2 species (<i>Lathyrus miniatus</i> Bieb. ex Stev., <i>Vicia loiseleurii</i> (Bieb.) Litv.) included to the Threatened list.</p> <p>An electronic database of wild medicinal plants of Azerbaijani flora (that combines the distributed and formulated information on 26 parameters) has been created. A book titled "Ethnobotany of the Caucasus" on wild medicinal plants was published together with foreign authors.</p>	MENR, ANAS, MoA, MoH, SCSMP	2017-2019
6.6. Improvement of regulatory framework in this area to ensure the sustainability of biodiversity				
6.6.1. Improvement of legislative acts directly or indirectly affecting biodiversity and sustainable use of biodiversity and ecosystem services				
6.6.1.1.	Analysis of the existing legal and regulatory framework, development of proposals to improve legislation, considering the country's international commitments	<p>The relevant measures on analysis of the existing legal and regulatory framework and the improvement of legislation (considering international commitments) have been continued, a number of legislative documents were developed and submitted to the Cabinet of Ministers on the implementation of the Laws of the Republic of Azerbaijan on Greenery Conservation and Fishery in 2017 and an inter-agency reconciliation procedure was implemented, as well. "Rules for provision of municipalities, non-governmental organizations and the population with planting materials, equipment, inventory and other means for greening", "Rules for restoration of greenery", "Rules for import and export of trees, shrubs, flowers and grass plants and their genetic material to the Republic of Azerbaijan for the purpose of protection of plants", "Rules of registration of fishery subjects", "Rules for hunting of fish and other aquatic bioresources", "Rules for</p>	MENR, MCT	2017-2020

		the Implementation of Aquaculture”, “Rules for cases of release of new species, hybrid forms of fish and other aquatic bioresources to natural fishery enterprises”, “Rules for acclimatization of fish and other water bioresources and transportation of acclimatization facilities”, “Rules for Fisheries Expertise”, “Rules for application of special protection regimes for fish and other aquatic resources in water protection zones and coastal strips” and “Rules for list of important fishery enterprises and restrictions on water use” were approved by the relevant decisions of the Cabinet of Ministers of the Republic of Azerbaijan, due to the strengthening of control measures for compliance with the requirements of environmental legislation. The Law on “Amendments to the Law of the Republic of Azerbaijan on Protection of Greenery” was adopted and the application of this law was approved by the Decree (dated 27.06.2014, No-190) by the President of the Republic of Azerbaijan.		
6.6.1.2.	To conduct research on biodiversity and prepare the next National Report	A working group of relevant government agencies, NGOs and freelance experts has been set up to assess the current status of biodiversity in the country regarding the implementation of the obligations under the Convention on Biological Diversity. Round tables were held with the participation of all stakeholders in the preparation of the report, information on the work done was officially collected at the end of each year and joint discussions were held.	MENR	2018-2020
6.6.2. To form a biological security system in order to protect biodiversity from genetically modified plants by 2020				
6.6.2.1.	Preparation of measures to ensure the implementation of the Cartagena Protocol on Biosafety of the United Nations Convention on Biological Diversity	Genetically Modified Organisms (GMO) Laboratory has been established under the Central Customs Examination Office of the State Customs Committee in order to strengthen control over planting materials and food products. The research is currently being conducted at the laboratory by the most up-to-date polymerase chain reaction (PCR) method. In addition, GMO laboratories equipped with express PCR laboratories were established and started to operate in the "Sinig Korpu" and "Boyuk Kesik" custom checkpoints of Tovuz Customs Office, "Yalama" and "Samur" custom checkpoints of Khachmaz Customs Office, "Mazimchay" custom checkpoint of Balakan Customs Office, "Gosha-Tepe" custom checkpoint of the Bilasuvar customs office and the border post of Astara customs office. Up to 5100 analyzes were conducted at various customs points during 2018. Experiments on GMO determination in the Biotechnology department of the Institute of Genetic Resources of ANAS have been continued in 2018. The equipment has been reviewed for the accreditation of the laboratory and appropriate documentation has been	MENR, ANAS, MoA	2017-2019

		<p>prepared.</p> <p>The Law on GMO of the Republic of Azerbaijan has been developed to improve the sustainability of biodiversity on the improvement of the regulatory framework in this field. Collaboration between the relevant government agencies has been strengthened in the field of combat to GMO plant.</p> <p>Proposals on highly qualified staff and laboratories equipped with modern equipment have been prepared in the direction of checking the GMO products of the various plant and animal products, their composition or mixtures imported into the Republic by using the modern molecular methods (PZR and RT-PZR).</p> <p>Experiments on GMO determination have been continued at the Department of Biotechnology under the Institute of Genetic Resources of ANAS in 2018.</p> <p>The equipments have been reviewed for the accreditation of the laboratory and appropriate documentation has been developed. It is necessary to take steps to expand the accredited laboratory network for GMO plant identification. Thus, the results obtained from the GMO identification without accredited laboratories are not accepted by international organizations. In this regard, it is necessary to maintain regular contacts with the International Accreditation Organizations of ANAS for accreditation of laboratories equipped with special equipment and obtaining the appropriate certificates.</p> <p>The theoretical and practical master degree and PhD students have been successfully prepared in the field of molecular biology on regulation of GMO plant circulation at the Institute of Genetic Studies of ANAS.</p>		
6.6.2.2.	Strengthening cooperation between state agencies in the field of genetically modified plants	<p>The list of certificates and codes of goods in the Nomenclature of Foreign Economic Activity has been developed in electronic and paper form while importation and exportation of endangered tree, shrub, flower and grass plants and their genetic material according to the implementation of the 2.11 and 2.12 items of the “Procedure for import and export of trees, shrubs, flowers and grass plants and their genetic material to the Republic of Azerbaijan for the purpose of protection of greenery” approved by the Cabinet of Ministers (dated 20.10.2017, No-467).</p> <p>Specialists from the Ministry of Agriculture, Ministry of Ecology and Natural Resources, Ministry of Health, State Committee for Standardization, Metrology and Patent and ANAS are represented at the Expert Council on Genetically Modified Plants (GMO) under the Institute of Genetic Resources of ANAS. As a result of joint activities, GMO identification techniques have been improved, joint regional course has been organized, and relevant proposals have been discussed and developed from the Cabinet of Ministers. The activities of council were strengthened and new members from the relevant organizations were included in 2017. Discussions were held on the GMO definition and the establishment of a biosafety system. It is advisable to check the</p>	MENR, MoA, ANAS, SCC	2017-2020

		imported food products with the participation of reference laboratory in order to ensure the sustainability of biodiversity. Information and suggestions were submitted to the State Customs Committee for the use of the capabilities of the scientific and technical base of the relevant institutes of ANAS in the determination of GMO products by modern molecular methods.		
6.6.2.3.	Expand the accredited laboratory network for the identification of genetically modified plants	<p>An optimized and appropriate protocol has been developed in 2013 on the methodology for the identification of genetically modified plants at the Institute of Genetic Resources of ANAS. 5 days regional training was organized at the Institute with the support of FAO in 2013. 40 specialists from the different organizations of Azerbaijan, Kazakhstan, Tajikistan and Kyrgyzstan attended the training. Practice on GMO detection, identification and quantitative analysis was conducted with the help of a Bulgarian international expert. All stages - reagent preparation, re-testing on RealTime PCR and analysis of results were studied. Currently, the methods developed by an international expert are being translated into Azerbaijani language. The specialists were familiarized with the rules of accreditation of GMO laboratories in Europe and other countries and learned their experience. Negotiations were held for the accreditation of the laboratory of the Institute and the technical specifications of the devices were launched.</p> <p>The laboratories with all possibilities for the identification of genetically modified plants have been established in the Institute of Genetic Resources of ANAS.</p> <p>In this regard, the National Academy of Sciences of the Republic of Azerbaijan is taking steps to establish relations with the International Accreditation Organizations for accreditation of laboratories equipped with special equipment and obtaining the appropriate certificates.</p>	MENR, MoA, ANAS, SCC SCSMP	2017-2020
6.6.2.4.	Strengthening the international cooperation to develop relevant scientific and technical capacity, training of qualified specialists and appropriate technical infrastructure for the regulation of genetically modified plants in the Republic	<p>The technology of obtaining genetically modified organisms is being changed and developed. Creation of plant varieties was launched in the developed countries by transferring the new genes to organisms and altering gene function in organism. In 2017, certain steps have been taken in this regard to establish contacts with world-renowned centers and to conduct joint research in order to identify these technologies, bring them to the country, and identify new organisms. Initially, certain agreements have been reached regarding the participation of Azerbaijan as an observer in the meetings of the European Food Security Society. An agreement was reached to conduct research with the relevant research institutions of Kazakhstan. Negotiations were held between the Institute of Agrarian Biotechnology of the Islamic Republic of Iran and the Institute of Genetic Resources of ANAS and reached an agreement in the field of joint staff training. Collaboration with the German Institute for Plant Genetic Resources was established to identify genetically modified plants and the employee will be sent to Germany for a period of 6 months in 2018.</p>	MoA, MENR, ANAS	2017-2020

		The theoretical and practical master degree and PhD students have been prepared in the field of “molecular biology” in 2017. Experienced scientists and young employees of the Institute had a long-term and short-term business trips to the US Fraunhofer Center for Molecular Biotechnology, Bordeaux Center of the National Institute of Agricultural Research of France. The relations were expanded with the US Agricultural Department of Cereal Disease Laboratory, French National Institute for Agricultural Research - Avignon Center, the Italian Institute for the Sustainable Plant Protection and the Plant Protection Department of Mustafa Kemal Atatürk University.		
6.6.3. Adaptation of regulatory and legal acts to European Directives on protection of biodiversity				
6.6.3.1.	Improvement of regulatory framework for biodiversity and harmonization of national standards with international standards in this area	Existing national legislative acts and requirements of international conventions have been mutually investigated in the field of “Improvement of regulatory framework for biodiversity”. Azerbaijani version of the standard “QOST R 57007-2016. Possible best technologies. Biodiversity. Terms and definitions” on biodiversity is being developed.	MENR, MoA, SCSMP	2017-2019
6.6.3.2.	Identification of opportunities to join the international initiatives on biodiversity	Existing national legislative acts and requirements of international conventions have been mutually investigated in the field of “Improvement of regulatory framework for biodiversity”. Azerbaijani version of the standard “QOST R 57007-2016. Possible best technologies. Biodiversity. Terms and definitions” on biodiversity is to be finalized. The Agreement reached on establishment of the Working Group at the 5 th meeting of the Intergovernmental Commission on trade and economic cooperation between the Republic of Azerbaijan and the Republic of Serbia held in Belgrade on 7 December 2018, according to the “Agreement between the Government of the Republic of Azerbaijan and the Government of the Republic of Serbia on cooperation in the field of environment protection” signed on 8 June 2011. In this regard, the Azerbaijani side has already informed the designated members of the Working Group and requested Serbia to submit a list of the members of the Working Group. Azerbaijan invited Serbian companies to take part in the 10th Caspian Ecology: Azerbaijan International Environment Exhibition to be held on November 13-15, 2019 in Baku. Our country continued to join international initiatives on biodiversity in 2018. Signing of agreements with other countries and international organizations on the biodiversity and	MoFA, ANAS	2017-2020

		accession to the international conventions is important for our country.		
6.7. Increasing public and civil society participation in the protection of biodiversity at national and local levels, as well as in the decision-making process in accordance with the Aarhus Convention requirements				
6.7.1.	Creation of effective mechanisms for public participation in decision-making regarding the protection and use of natural resources and their implementation, including gender equality	<p>The Public Council under the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan was established for the purpose of making effective decisions regarding the rational use and protection of natural resources, as well as ensuring the public participation in the implementation of these decisions. The Council consists of representatives of non-governmental organizations, which are actively working in this sphere and implementing public projects.</p> <p>In addition, 8 training courses were held at the Aarhus Public Environmental Information Center, organized by the Azerbaijan Office of the Regional Center for the Caucasus with the participation of representatives of various NGOs and government agencies in 2017. About 100 representatives of non-governmental organizations participated in these training courses.</p> <p>The Public Environmental Council under the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan was established to enhance cooperation with non-governmental organizations and public representatives (working in the field of environmental protection, environmental security and effective use of natural resources) and to increase the effectiveness of the Aarhus Convention provisions implementation.</p>	MENR, ANAS, MoA	2017-2020
6.7.2.	Preparation of appropriate measures to increase the interest of different age groups to the nature at the awareness clubs	<p>Workshops and contests on biodiversity conservation and decision-making were organized with the participation of students and schoolchildren, and movies were demonstrated to increase the interest in nature at the Aarhus Public Environmental Information Center under the Ministry of Ecology and Natural Resources, as well as at various universities and schools. The Green Network Environmental Awareness Program has been implemented to educate the schoolchildren in secondary schools of Baku by the Republican Center for Child and Youth Development. Awareness-raising workshops on energy efficient use, creative solutions for waste collection and recycling, water conservation, healthy nutrition, green design of the school yard, "green buffet", climate change mitigation were held for school-children with the participation of teachers. 40 schools out of 300 secondary schools participating in the Green Network Environmental Education Program were represented in the final round. Secondary schools No-214, named after V.Sadigov and No-6, named after T.Ismayilov, School with Humanities subject were awarded with the environmental symbols "My school pays attention to the environment" and "Green school".</p>	MENR, LEA	2017-2019

		<p>Environmental protection activities have been organized in Hajigabul district and the provision of students with environmental knowledge has always been in the spotlight. Various measures are being taken to protect the environment, environmental factors, environmental challenges, causes and solutions. The project on “School gardens” was implemented in the schools by the IDEA Public Union and the Ministry of Education. 500 pistachios, almonds and pomegranate seedlings were planted on this project with the participation of school-children and pedagogical collective. Tree-planting actions were organized on the eve of the anniversary of the national leader Heydar Aliyev. The regional stage of the republican ecological brain-ring knowledge competition was held in connection with the promotion of ecological knowledge. Representatives of the secondary schools of district won the right to participate in the first republican competition of schoolchildren on the subject "Eco products and agrobiological diversity" with the expert support from the Ministry of Education, the Republican Center for Ecological Education and Practice, the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the Ministry of Agriculture of the Republic of Azerbaijan.</p> <p>Awareness activities on the increase of interest in nature and the expectation of ecological balance were held in the educational enterprises of Gazakh region and in the department of Youth and sports. In addition, the competitions, essays and exhibitions were held at schools in this field. Regular meetings were held among the population in this regard.</p> <p>Round tables were held together with the Department of Education, Department of Youth and Sports and Forest Protection and Rehabilitation Enterprise in Balakan with the participation of students and youth on the following topics: "Let's protect the ecology", "Let's protect the woods from fires", "Let's protect the ecological balance".</p> <p>Tree-planting campaign was held under the logo "Let's plant a tree for everyone" to increase the interest in nature in the Siyazan Youth and Sports Administration in March 2017. During the campaign, more than 100 youth planted about 300 evergreen trees and ornamental bushes. Also, an environmental clean-up action was organized according to the initiative of the Department by the region's youth on the beaches of the Caspian Sea in July. A few kilometers territory along the coast of the Caspian Sea was cleared from the domestic and other wastes by youth joined to the campaign. Community of Siyazan region actively participated in “Republican Greening” marathon organized by IDEA Public Union. Different types of trees were planted within the marathon in the streets, parks of Siyazan region, as well as from the north entrance of city to the motorway of “Baku-Russian Federation State Border” and from the south entrance of the city to the beginning of the motorway of “Siyazan-Mashrif” road.</p> <p>An environmental education clubs (covering different age groups) was established at the</p>		
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		Children's Youth Development Center under the Department of Education and Youth in Tovuz region. Various measures are being held here to increase the interest in nature. Environmental leaflets were printed and distributed to schoolchildren, competition for healthy products within agrobiological diversity measures was organized, "International Earth Day" and "International Water Day" celebrated, and participation of schoolchildren in greening activities was provided by the Regional Education department. In addition, projects on forest protection and domestic wastes were developed. The implementation of the Project on sorting, recycling of paper, cardboard and plastic wastes aimed at promoting nature protection, environmental balance, waste management and recycling was launched with the initiative of IDEA Public Union.		
6.8. Development of joint management in the field of biodiversity conservation				
6.8.1. Development of cooperation between relevant state authorities in the field of biodiversity conservation				
6.8.1.1.	Determining opportunities and development of proposals for cooperation on the conservation of biodiversity, including the development of ecotourism, the establishment of forest areas, fire protection and establishment of early warning systems, pasture management and other issues among various government agencies	<p>Relevant measures on afforestation were carried out in the forestry fund lands of 10152 hectares' area by the Ministry of Ecology and Natural Resources. 4,072 ha of agro-trees, 60 ha of citrus gardens (<i>Acca sellowiana</i>, mandarine, orange, loquat and lemon) and 1,608 thousand trees were planted in the southern zone. Measures to assist the natural regeneration of the forests have been carried out at the 6,150 ha area. Seeds were sown in 108 ha area, 1,023 thousand seedlings were buried in 24 ha and 3 335 thousand were buried in 46 ha area. 35 million different varieties of planting material were cultivated in the seedling fields. 45 770 kg seeds from the different types of fruit trees and shrubs were supplied in the field of seed provision. Totally, measures on the afforestation of 159,3 thousand hectares' areas have been carried out, including 52.1 thousand hectares of new forests and 106 million trees have been planted for the last 16 years.</p> <p>893 different ornamental and fruit trees, 326 roses, over 200 different seasonal flowers were planted in the territory of "Yanar Mountain" State Historical-Cultural and Natural Reserve. About 200 ornamental trees to be planted in the reserve for increasing the greenery in the territory of reserve.</p> <p>More than 250 Eldar pine , 350 fruit trees have been planted, and information boards were prepared for protection of trees from the environment in the territory of "Avey" State Historical-Cultural Reserve. Booklets and flyers on the tourism potential of the reserve were developed.</p>	MENR, MoE, MoA, MES, ANAS, MCT, SOCAR	2017-2019

		<p>An agreement was signed between the Ganja Regional State Fire Control Office of the State Fire Control Service of the Ministry of Emergency Situations of the Republic of Azerbaijan and “Keshikchidagh” State Historical-Cultural Reserve and fire safety information boards were hung.</p> <p>Greenery and environmental improvement work were carried out in the protection zones of reservoirs by the Ministry of Emergency Situations. An action plan has been developed to ensure fire safety in the forest and surrounding areas of forests. Fire and technical inspections were conducted near the high-voltage air lines passing through the forest and forest lines and in the protected area. The letters were sent to the regional executive authorities, municipalities, police departments, regional electric networks and their local authorities for the fulfilment of relevant measures in the direction of clearing the areas of the bushes that create a potential fire hazard and restoration of emergency areas on power lines, poles, transformers.</p>		
6.8.1.2.	Expanding bilateral and multilateral cooperation between various government agencies on the conservation and sustainable use of biodiversity	<p>Activity directions related to the expansion of bilateral and multilateral cooperation between various government agencies regarding the protection and sustainable use of biodiversity are identified and multilateral cooperation with the relevant state bodies are being implemented.</p> <p>Republican Center for Child and Youth Development of the Ministry of Education expanded the cooperation with the Ministry of Ecology and Natural Resources, Ministry of Agriculture, Ministry of Tourism and Culture, Institute of Botany, Geography, Zoology, Soil Science and Agrochemistry of ANAS, Central Botanical Garden of ANAS, Mardakan Dendropark, SOCAR, Baku State University, Azerbaijan State Agrarian University and Azerbaijan State Tourism University for improvement of environmental education of schoolchildren.</p>	MENR, MoE, MoA, MES, ANAS	2017-2019
6.8.2. Strengthening cooperation with neighboring countries in the conservation of biodiversity				
6.8.2.1.	Implementation of measures to identify, evaluate and solve transboundary environmental challenges	<p>Regional workshop was held on 28 November – 1 December 2017, to discuss the results of the activities (held in Shaki, Gax, Zagatala, Guba) under the “Ecocorridor Program” project (2017) implemented by TJS and MENR with the support of WWF and KfW.</p> <p>Regional conference was held on 5 December 2017 for development of transboundary eco-tourism products, discussion of details and submitting the developed documents within the TJS.</p> <p>Business trips of Azerbaijani and Georgian experts to the Lagodexi and Zagatala protected areas were organized on monitoring activities on September 2017. Initial monitoring was held in Lagodexi. The main purpose of the event was the development of a joint monitoring plan and monitoring methodology for Lagodexi and Zagatala protected areas.</p>	MoFA, MENR	2017-2020

		<p>Delegation of the Ministry of Foreign Affairs, Ministry of Emergency Situations, Ministry of Ecology and Natural Resources, Azerbaijan Amelioration and Water Farm OJSC visited Georgia on 5 October 2017, for the purpose of discussing the draft Agreement on the “Conservation and Sustainable use of the Kura River Basin” between the Republic of Azerbaijan and Georgia. The parties expressed their position on important issues arising from the draft agreement during the meeting. The parties agreed to continue the bilateral negotiations in the direction of signing the document, to send feedback and proposals of the Azerbaijani side to the Georgian side through diplomatic channels and to get respond from the other side as soon as possible.</p>		
6.9. Providing adequate resources for the conservation and sustainable use of biodiversity				
6.9.1. Mobilization of potential and internal resources that can comprehensively provide protection and enrichment of biodiversity				
6.9.1.1.	<p>Assessment of necessary resources, preparation of proposals and mobilization of resources for protection and effective use of biodiversity</p>	<p>The sanitary protection zones of the Korchay State Nature Reserve and Eldar Shami State Nature Reserve were approved by the Decrees of the Cabinet of Ministers of the Republic of Azerbaijan, respectively dated 13 November 2017, No-487 and, dated 22 December 2017, No-592, in connection with the implementation of subparagraph 1.4.2. of the Decree (dated 15 May 2014, No-166) on the compilation of the Law (dated 4 April 2014, No-924-IVQD) on Amendments to the Law of the Republic of Azerbaijan on “Specially protected nature areas”.</p> <p>Appropriate measures are being carried out to establish the sanitary protection zones of Shirvan, Goygol and Hirkan NPs, Shirvan Turyanchay and Garayazi state nature reserves.</p> <p>A map of land areas to be included into the sanitary protection zones of the state nature reserves is prepared and is currently in coordination with the relevant state authorities</p> <p>A map of land areas to be included into the sanitary protection zones of the Shirvan NP Shirvan and Turyanchay state nature reserves was prepared and is currently in the conciliation phase with the relevant state authorities.</p> <p>Investigation was launched on weak research of mushroom in comparison with plants and animals. It was obvious from the research that, the features that they perform during production, indicator, degradation and regulatory processes are important in determining the use of mushroom as bioresources. 12 types of xylophilic mushroom are eaten and they have sufficient resources in the conditions of Azerbaijan. Nevertheless, it was determined that, 32 species of mushrooms are described as species that need protection and some of them are endangered and they need protection as in “Red Book”.</p>	<p>MENR, MoA, ANAS</p>	<p>2017-2020</p>

		Proposals were made by the Dendrochronology Laboratory and submitted to the relevant authorities to assess the current state of species in populations, determination and restoration of their age and degree of effectiveness.		
6.9.1.2.	Expanding the use of alternative and renewable energy sources in regions to protect biodiversity	New generating forces of 420 MW, including 350 MW wind, 50 MW solar and 20 MW bioenergy is intended to create in order to diversify the energy portfolio in the “Strategic Roadmap for the Development of Utilities (Electric and Thermal Energy, Water and Gas) in the Republic of Azerbaijan”, approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016. The project conception of 6 wind energy park with a total capacity of 350 MW, 10 solar energy park with a total capacity of 50 MW and 7 bioenergy with a total capacity of 20 MW was developed and submitted according to the Strategic Roadmap. In addition, the predictions in the field of use of renewable energy sources by 2025 and 2030 and the concept of perspective projects for their implementation were developed.	SAARES MENR	2017-2020
6.10. Strengthening planning and management capabilities for biodiversity use				
6.10.1. Planning biodiversity activities relevant to the goals set forth in the Development Concept “Azerbaijan 2020: Look into the Future”				
6.10.1.1.	Determination and implementation of necessary measures for the implementation of obligations under the Convention on Biological Diversity	The Ministry of Ecology and Natural Resources continued its activities in accordance with the commitments to the UN Convention on Biological Diversity. The Action Plan on Implementation of “The National Strategy on Protection and Sustainable Use of Biodiversity in the Republic of Azerbaijan for 2017-2020” has been approved to ensure the acceleration of the implementation of this Strategy by the Ministry of Ecology and Natural Resources. The implementation of the regulations of the Strategy by the Ministry of Ecology and Natural Resources are the priority directions. The “Working Group” was established and initial information was collected at the MENR during 2017, in accordance with the requirements of “Preparation and Submission of National Reports” of the Convention. Clearing-House Mechanism (CHM) website was developed for public awareness in accordance with the requirements of Convention. Currently, data downloading is underway to this page.	MENR	2017-2020

6.10.2. Strengthening the opportunities for conservation of biodiversity.

<p>6.10.2.1.</p>	<p>Strengthening biodiversity conservation capacities, assessment of existing and required opportunities, preparation of proposals, collaborating with NGOs and international organizations in this regard</p>	<p>Relevant works were continued in the direction of conservation and sustainable use of biological diversity in 2017.</p> <p>Several number of activities were carried out within the Program on “Integrated Management of Biodiversity in the South Caucasus” implemented by the Ministry of Ecology and Natural Resources and GIZ during 2017.</p> <p>Three regulations were prepared to support the implementation of the Law on “Wildlife” within the mentioned program. Awareness campaigns and GIS trainings on forestry monitoring were conducted by the international experts and erosion risk assessment was held with the application of GIS and Remote Sensing Technology in Ismayilli region.</p> <p>Trainings on "Integrating Ecosystem Services into Development Planning" were conducted for the staff of various organizations within this program in cooperation with ADA and Western University.</p> <p>The project on “Conservation of leopards in the Caucasus” was continued within the bilateral cooperation between the Ministry of Ecology and Natural Resources and the World Wildlife Fund (WWF) during 2017.</p> <p>Construction of an administrative building of the Gizilaghaj National Park (with a total area of 300 m²) has been completed and provided with the necessary equipment in 2017 within the project on creation of Gizilaghaj National Park by expanding the territory of the Gizilaghaj State Reserve and put into operation by the staff of the reserve with the support of GEF.</p> <p>At the same time, the Point No. 1 of the Reserve has been renovated, the area has been expanded and equipped with the necessary equipment, and two more posts are being renovated. In addition, the existing ditches along its boundaries have been deepened to 13 km to strengthen the state nature reserve protection regime.</p> <p>At present, formal procedures for the establishment of a national park on the basis of the Gizilaghaj State Nature Reserve have been launched. Thus, 1: 25000 and 1: 100000 GIS maps have been developed and boundaries of the national park have been fully clarified and a national conformance procedure has been initiated.</p> <p>The project documentation of the Administrative Building Complex of National Park has been developed and awareness campaigns were conducted for the local population in 2017, within the project on the “Establishment of Samur-Yalama National Park” with the support of the German Development Bank (KfW).</p> <p>The activities on conservation of leopards in the Caucasus are being continued by the Ministry of Ecology and Natural Resources, with the support of IDEA Public Union and World Wildlife Fund (WWF). In recent years, the number of leopards has increased in the</p>	<p>MENR</p>	<p>2017-2020</p>
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		<p>South Caucasus as a result of efforts to protect leopard populations and 7 leopards were recorded in Zangazur National Park and 3 leopards in Hirkan National Park by using advanced technologies. Public awareness was carried out among the residents of residential areas close to the habitat of leopards in 2017. Relevant measures were carried out according to a survey of the Ministry of Ecology and Natural Resource, within the TJS-III project, in the temporary settlements of IDPs located near the Aghgol National Park and Yenikend, Shakarli, Gardili, Hasanli villages of Shirvan National Park. National ecotourism standards within the component on “Ecotourism improvement” have been developed by adapting the regional ecotourism standards to local conditions. The concept of transboundary eco-tourism products (including Zagatala suburbs, Acinour Sanctuary, Goygol National Park), Ecotourism Management Plan of Goygol National Park and Ecotourism Marketing Strategy of Goygol National Park have been developed. Workshops were held for the staff of Goygol National Park, persons involved in tourism and company representatives in the framework of this project. Study tours have been arranged to Muritz National Park of Germany, Prealpi Giulie National Park of Italy and Triglav National Park of Slovenia within the improvement of ecotourism on April 2017. In addition, a business plan was developed for the area of Ecovillage cottages located in Shirvan National Park.</p>		
6.10.2.2.	<p>Strengthening the cooperation with non-governmental and international organizations in enhancing human resource knowledge and skills in the field of biodiversity</p>	<p>Effective and purposeful environmental activities were continued successfully in the field of international cooperation by the MENR in 2017.</p> <p>A regional workshop on maritime areas with ecological and biological significance was held on 24-29 April 2017 in Baku with support of CBD and in cooperation with the Commission on the Protection of the Black Sea Against Pollution, Framework Convention for the Protection of the Marine Environment of the Caspian Sea. These scientific-technical workshops are organized according to the relevant decisions taken to facilitate the identification of marine areas with environmental or biological significance during the 11th and 12th Conference of the Parties to the Convention. Representatives from Bulgaria, Georgia, Iran, Kazakhstan, Romania, the Russian Federation, Turkey, Turkmenistan and Ukraine, as well as international organizations, relevant government agencies and non-governmental organizations participated in the workshops.</p> <p>The 1st Intergovernmental Session of the Commission on the Protection, Efficient Use and Joint Management of the Water Resources of the Caspian Sea was held on November 21-23, 2017 in Baku. The first meeting of the Commission was held with the participation of delegations from 5 Caspian countries - The Republic of Azerbaijan, the Islamic Republic of Iran, the Republic of Kazakhstan, the Russian Federation and Turkmenistan. The Protocol was signed as a result document of the event by the delegations from the Caspian countries of Commission.</p>	MENR, ANAS	2017-2020

		<p>“Memorandum of Understanding for cooperation in the protection of endangered wildlife and conservation of its natural habitat between the Government of the Republic of Azerbaijan and the Government of the State of Qatar” was signed during the high-level visits.</p> <p>At the same time, the negotiations are underway to sign the Framework Agreement between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and Caucasus Nature Foundation in the near future.</p>		
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SECTION III. EVALUATION OF PROGRESS IN ACHIEVING NATIONAL TARGETS

Table below provides an indicative overview of Azerbaijan's current state of progress (0-25% = limited progress; 25-50% = fair/reasonable progress; 50-75% = good progress; 75-100% = excellent progress) in meeting the Aichi Biodiversity Targets.

The headline indicators used to assess the state of progress are briefly listed and, where reliable data is available, quantitatively described.

The main goals of the National Strategy are: sustainable use of genetic resources; conservation of biodiversity and transfer to future generation; poverty alleviation; maintenance of ecological balance; ensuring transition to a "green economy"; promotion of environmental education; restoration of endemic and local fauna species; development of the protected areas network; and reducing the threats to biodiversity.

The National Strategy has the following priority objectives:

- ensuring broad extension of environmental education in the society for for improving awareness of population on biological diversity and ecosystem services;
- improving biodiversity monitoring systems;
- restoring and conserving biodiversity, ecosystems, genetic diversity;
- developing and effectively managing the protected areas and expansion of the current network;
- reducing the negative impacts on biodiversity and its sustainable use;
- improving regulatory framework for ensuring the sustainability of biodiversity;
- increasing public participation in biodiversity conservation at the national and local level;
- developing collaborative management in biodiversity conservation;
- providing adequate resources for conservation and sustainable use of biodiversity;
- strengthening institutional capacities in the planning, management and use of biodiversity.

No.	Activities	Indicators	Current state of progress (0-25%;25-50%;50-75%;75-100%)
1	2	3	4
6.1. Ensuring broad extension of environmental education in the society for improving awareness of population on biological diversity and ecosystem services			
6.1.1. By 2020 reflection of the issues related to biodiversity and ecosystem services at all levels of education, mobilization of the required resources and increasing the knowledge of the relevant staff.			
6.1.1.1.	Increasing number of issues related to environmental protection, biodiversity conservation and ecosystem services at different levels of education.	knowledge of the students on the protection of environment, conservation of biodiversity and ecosystem services will increase	
6.1.1.2.	Providing detailed information on biodiversity and environment in the textbooks	detailed information on biodiversity and environment will be provided in the textbooks	
6.1.1.3.	Supporting environmental education centers in order to increase knowledge and education of school children on ecology.	the efficiency of the environmental education centers will increase	
6.1.1.4.	Establishing of information, resources and training centers on conservation of biodiversity and strengthening technical potential to increase capacity and skills of human resources	the level of knowledge and skills of personnel working in the fields related to environment will increase	
6.1.2. By 2020 strengthening the actions for increasing the capacity of existing eco-tourism and use of the potential in the country			
6.1.2.1.	Developing of public awareness and promotional materials about biodiversity, and particularly about the national parks of the Republic of Azerbaijan	components of national parks and biodiversity will be promoted, promotional information will be disseminated	
6.1.2.2.	Expanding the database on tourism potential of specially protected areas.	database on different ecotourism opportunities aiming at the development of tourism of the republic	

		will be established.	
6.1.2.3.	Inventory of nature monuments	updated list of nature monuments will be prepared.	
6.1.2.4.	Conducting of advertising info-tours	various tourism packages will be prepared for tour operators.	
6.1.2.5.	Identifying the tour operators engaged in eco-tourism in National Parks, and holding info-tours for media representatives, local and foreign tourists	awareness on biodiversity and ecosystem services will increase, and vast opportunities for development of various kinds of tourism in the protected areas will be ensured	
6.2. Improvement of monitoring system of biodiversity			
6.2.1.	Improvement of monitoring system by using the progressive methods based on international practice	the implementation of the proposals on improvement of biodiversity monitoring system will be ensured	
6.2.2.	Assessment of the current status of biodiversity components	environmental assessment document related to the assessment of the current status of biodiversity components will be prepared	
6.2.3.	Development and application of modern monitoring methods	modern monitoring methods will be prepared	
6.2.4.	Inventory of plant and animal species and designing electronic database	Inventory of fauna and flora species in the Republic of Azerbaijan will be conducted and electronic database will be designed	
6.2.5.	Designing Information and Advance Warning System on biodiversity	the system monitoring the loss and reduction rate of biodiversity will be designed	
6.2.6.	Maintaining accurate records of bioenergy resources	overall ecological balance will be ensured as a result of the work done in the field of efficient use of bioenergy resources	
6.3. Restoring and preserving biodiversity, ecosystems, genetic diversity			
6.3.1. By 2020 Increasing the effectiveness of protection of environment and biodiversity			
6.3.1.1.	For the inland water bodies of Azerbaijan, and within the Azerbaijani sector of the Caspian Sea, improvement of	pollution of the Caspian Sea, trans-boundary water bodies, as well as	

	the biodiversity components management, prevention of industrial and domestic waste pollution; and development and implementation of action plans to protect biodiversity of water bodies around large residential settlements.	inland water bodies will be reduced, effective protection of biodiversity will be ensured through improvement of monitoring and management systems as well as through availability of a reliable scientifically-sound database.	
6.3.1.2.	Study the factors impacting on the sustainable management of forests and wetlands; preparation of action plans on rehabilitation and restoration of areas impacted by human-induced activities; and implementation of pilot projects.	degradation will be prevented as a result of effective management of forest areas and wetlands Guidelines and management plans on conservation and sustainable management of forests and wetlands will be prepared.	
6.3.1.3.	Implementation of best practices in management of pastures; implementation of activities for improved management of pastures; preparation of pasture management plans; and implementation of pilot projects.	comprehensive database on winter and summer pastures will be established, maps will be produced, and based on the results of pilot projects will be broadly implemented	
6.3.1.4.	Improvement of control mechanism for observance of the “Procedures on letting the pastures and hay fields on lease and for use”	the standards on using pastures for intended purposes and for grazing livestock will be observed	
6.3.1.5.	Implementation of best practices and preparation of management plans for sustainable use of vulnerable ecosystems and areas without special protection status but where rare and threatened species occur	biodiversity-rich areas without protection status will be effectively managed with the help of management plans and relevant guidelines	
6.3.1.6.	Implementation of up to date methodologies for inventory and monitoring of forested areas.	current status of forest areas will be assessed and maps will be produced	
6.3.1.7.	Development and implementation of urgent measures for ensuring natural restoration and conservation of rare species of biodiversity components and their sustainable use in trans-boundary areas	effectiveness of forest and shrub land management will be improved	
6.3.2. By 2020 conservation of genetic systems in agro-biological diversities and of genetic diversity of cultured plants and domestic animals including species and varieties having economic and cultural values			
6.3.2.1.	Taking necessary actions for promotion of the use of crop rotation and other efficient agro-technical actions	efficient agro technical methods will be used in agriculture	

	and cultivation of crops created by traditional methods by taking into account land and climatic conditions of the regions		
6.3.2.2.	Preparation of pilot projects for the development of organic farming	the results of the pilot projects will be widely used	
6.3.2.3.	Development of proposals and implementation of pilot projects for leaching saline soils, and for artificial reforestation using locally adapted tree and bush species; implementation of ameliorative activities for returning the soil to sowing circle. Implementation of pilot projects on use of organic fertilizers in agricultural areas including high mountain areas	as a result of effectively implemented action plans in erosion-affected areas, productivity will be increased in degraded areas and protective forests will be planted	
6.3.2.4.	Implementation of the projects for the use of organic fertilizers in agricultural areas, including high mountain areas.	productivity will increase in the agricultural areas and organic products will be obtained.	
6.3.2.5.	Implementation of activities that increase the use of traditional agricultural plant varieties and animal breeds that are resistant to the detrimental effects of global climate change.	inventory of traditional plant varieties and animal breeds will be ensured, as a result of pilot projects, new and updated lists will be presented and best practice will be provided	
6.3.3. By 2020 improvement of the status of rare and threatened flora and fauna species in the Republic of Azerbaijan as a result of conservation and sustainable use			
6.3.3.1.	Improvement of activities for protection of important rare and threatened plant and animal species in order to ensure their effective conservation	rare and threatened species will be researched and latest updated lists will be included in the third edition of Red Book.	
6.3.3.2.	Research and assessment of habitat fragmentation and restoration of important habitats in order to protect national Red Book listed species.	detailed information will be collected about habitat fragmentation and necessary action plans will be implemented in order to prevent related negative impacts.	
6.3.3.3.	Development of action plans for restoration of rare and threatened plant and animal populations; implementation of reintroduction projects in the country	activities aimed at the restoration of rare and threatened plant and animal populations, including re-introduction projects, will be implemented	
6.4. Developing and effectively managing the protected areas and expansion of the current network			

6.4.1.	Expansion of protected areas, including in the Azerbaijani sector of the Caspian Sea and terrestrial areas.	total extent of protected areas in the republic will be enlarged by 12% in terrestrial areas and by 2% in coastal areas.	
6.4.2.	Improvement of the system of management of protected areas	the work of management of the protected areas will be improved, taking into account the international practice	
6.4.3.	Development of Emerald Network areas within European Neighborhoods Policy framework.	protected areas will be included into the Emerald Network.	
6.5. Reducing the negative impacts on biodiversity and its sustainable use			
6.5.1. By 2020 elimination of the negative impacts and threats on biodiversity and bringing the environmental conditions in line with the level which will be able to ensure sustainable biodiversity			
6.5.1.1	Assessment of existing and potential negative impacts in biodiversity-rich areas and development of action plans to prevent or to minimize negative impacts.	negative impacts will be identified and all necessary measures to avoid or to minimize those impacts will be implemented.	
6.5.1.2.	Assessment of impacts of climate change on biodiversity in sensitive areas (e.g. wetlands, high mountains, coastal zones of Caspian Sea) and development of adaptation programs.	assessment will be made on impact of climate change on biodiversity in different ecosystems and the number of mitigation measures will be increased	
6.5.1.3.	Assessment of current status of invasive species of flora and fauna; identification of their pathways on sea, terrestrial lands and wetland ecosystems; establishment of control mechanisms to prevent their entrance to the country; and designing electronic database on the number and population of the invasive species .	database on distribution, number and population of invasive species will be designed; control mechanisms to prevent their entrance to the country will be strengthened; and the necessary legislative framework to address threats will be in place.	
6.5.1.4.	Assessment of the population of invasive species that have significantly negative ecological and economic impacts, costing of the impacts and development of mitigation plans.	mechanisms will be developed to improve the management of invasive species.	
6.5.1.5.	Studying and promotion of the use of bio-energy from agriculture and domestic waste.	in case of positive result of the study, bioenergy will be generated from agricultural and domestic waste and	

		this energy will be used	
6.5.1.6.	Assessment of the transition potential of industry to a "green economy" for protection of biodiversity and sustainable use of natural resources,	with the help of international experts preliminary assessment document will be prepared	
6.5.1.7.	The wide promotion of eco-friendly agricultural products	the share of total production of organic agricultural products will increase	
6.5.2. . Sustainable Use of Natural Resources related to Biodiversity and Ecosystems			
6.5.2.1.	Assessment of water bio-resources; research of population dynamics of commercial fish species; identification of hunting quotas; and development of aquaculture.	scientifically-sound methodologies will be developed to identify commercial fish stocks and fishing quotas; in the Caspian Sea and inland waters and necessary activities to develop aquaculture will be implemented.	
6.5.2.2.	Preparing and realization of activities for development of sustainable hunting from the perspective of efficient use of biodiversity	necessary legislative framework will be developed to ensure the sustainability of hunting activities.	
6.5.2.3.	Strengthening controls on the collection and trade of medicinal plants and ensuring sustainable use of such plants	medicinal plants will be collected only by certified physical and legal persons. Regulations and necessary guidelines for collection and use of wild plants will be developed.	
6.6. Improving regulatory framework for ensuring the sustainability of biodiversity			
6.6.1. Improvement of legislative acts concerning directly or indirectly to biodiversity in relation to sustainable use of biodiversity and ecosystem services			
6.6.1.1.	Analysis of the existing regulatory framework, the improvement of legislation related to the international obligations of the country, and development of proposals for improvement of legislation	new legislative acts will be adopted by taking into account the applicable legislative acts and international obligations undertaken by the country in international programs	
6.6.1.2.	Conducting researches across the country on biodiversity and development of the next National Report	as the implementation of the obligations stipulated in the "Convention on Biodiversity", the	

		corresponding report will be presented and transparency in this field will be ensured	
6.6.2. By 2020 for protection of biodiversity from genetically modified crops, the formation of biological safety system			
6.6.2.1.	Development of measures for ensuring the execution of UN Cartagena Protocol on Biosafety	the execution of Cartagena Protocol will be ensured	
6.6.2.2.	The strengthening of cooperation of state agencies in the fight against genetically modified crops	state agencies will cooperate in the field of monitoring genetically modified crops	
6.6.2.3.	Expanding the network of accredited laboratory for the identification of genetically modified crops	the number of specialized laboratories for genetically modified crops will increase	
6.6.2.4.	Strengthening international cooperation for the development of appropriate scientific and technical potential, training of qualified specialists and appropriate technical infrastructure to regulate the turnover of the genetically modified crops in the republic	the number of specialists in regulation of genetically modified crops' turnover will increase	
6.6.3. Bringing the regulatory acts on protection of biodiversity in line with the EU Directives			
6.6.3.1.	Improvement of regulatory framework on biodiversity and bringing the national standards in line with the international standards in this field	necessary steps will be taken by improvement of the legal framework	
6.6.3.2.	Identification of opportunities to accede to the international initiatives on biodiversity by the republic	certain opportunities will be identified and actions will be taken for their implementation	
6.7. Increasing the level of participation of the public and civil society in protection of biodiversity as well as in the decision-making process at national and local level according to the requirements of Aarhus Convention			
6.7.1.	Development of effective mechanisms requiring the public participation by taking into account the provision of gender equality while adopting decisions on	participation of the public will be ensured by taking into account gender equality in the course of adoption and	

	protection and use of natural resources	execution of decisions on conservation and sustainable use of biodiversity	
6.7.2.	Arrangement appropriate events at various forms of environmental education and enlightenment clubs for increasing the interest of certain age groups in nature	proposals on effective activity of environmental clubs will be made, and competitions, exhibitions and meetings will be held in various formats	
6.8. Developing collaborative management in biodiversity conservation			
6.8.1. Development of cooperation between the relevant state agencies in the field of conservation of biodiversity			
6.8.1.1.	Defining opportunities and developing proposals for cooperation between governmental organizations in biodiversity conservation - including: developing ecotourism; aforestration; preventing forest fires and establishing early warning systems; pasture management, and other issues.	decisions on conservation of biodiversity will be adopted between the relevant state agencies as a result of increasing cooperation and common approach will be applied	
6.8.1.2.	Expanding bilateral and multilateral cooperation between different governmental organizations for conservation and sustainable use of biodiversity.	necessary measures will be implemented by determining the opportunities of cooperation in certain sphere	
6.8.2. Strengthening cooperation with neighbor counties in relation to conservation of biodiversity			
6.8.2.1.	Taking measures aimed at identification, assessment and addressing trans-border environmental problems	environmental investigations will be conducted and reports will be prepared and cooperation in solving the issues will be expanded	
6.8.2.2.	Taking measures aimed at identification, assessment and addressing trans-border environmental problems	environmental investigations will be conducted and reports will be prepared and cooperation in solving the issues will be expanded	
6.9. Providing adequate resources for conservation and sustainable use of biodiversity			
6.9.1.	Assessment of necessary resources, preparation of proposals and mobilization of resources for conservation of biodiversity and their efficient use	conservation and efficient use of biodiversity will be ensured	
6.9.2.	Expanding the use of alternative and renewable energy	the use of alternative and renewable	

	sources in the regions for conservation of biodiversity	energy sources will be expanded in the regions	
6.10. Planning the use of biodiversity and strengthening institutional capacities			
6.10.1. Development and implementation of biodiversity-related action plans under the Development Concept "Azerbaijan - 2020: vision.			
6.1 0.1. 1.	Define and implement the necessary measures for the implementation of the commitments related to the Convention on Biodiversity	The targets of the concept addressed to the conservation of biodiversity will be fully achieved	
6.10.2. Expansion of opportunities for conservation of biodiversity			
6.1 0.2. 1.	Expansion of existing opportunities for the conservation of biodiversity, assessment of the current and required opportunities, preparation of proposals and inclusion them in the relevant programs, cooperation with international organizations and with non-governmental organizations in this regard	Biodiversity in technical, development of administrative, financial and human resources will be ensured	
6.1 0.2. 2.	Strengthening cooperation with international organizations and non-governmental organizations for improving knowledge and skills of human resources operating in the field of biodiversity	opportunities for cooperation will be identified and joint training will be held regularly for capacity building in the field of biodiversity	

SECTION IV. DESCRIPTION OF NATIONAL CONTRIBUTION TO IMPLEMENTATION OF EACH OF THE GLOBAL TARGETS FOR THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY ADOPTED IN AICHI

Based on the experience and challenges connected with resolving practical biodiversity targets, a renewed Strategic Biodiversity Conservation Plan was adopted at the COP held in Nagoya in 2010 (Aichi Prefecture, Japan), which includes 5 Global Strategic Goals and 20 Targets for the period of 2011-2020. The purpose of the Global Goals is to intensify actions of the CBD Parties in conservation and sustainable use of biodiversity. The strategic plan is designed to provide a flexible structure for setting national goals and targets, and enhancing coherence in the implementation of the Convention and decisions of the COP.

Based on national and global trends, the priorities of Azerbaijan in the field of conservation and sustainable use of biodiversity are summarized and formulated in 10 national strategic goals and 15 targets.

The main goals of the National Strategy are: sustainable use of genetic resources; conservation of biodiversity and transfer to future generation; poverty alleviation; maintenance of ecological balance; ensuring transition to a “green economy”; promotion of environmental education; restoration of endemic and local fauna species; development of the protected areas network; and reducing the threats to biodiversity.

The National Strategy has the following priority objectives:

- ensuring broad extension of environmental education in the society for improving awareness of population on biological diversity and ecosystem services;
- improving biodiversity monitoring systems;
- restoring and conserving biodiversity, ecosystems, genetic diversity;
- developing and effectively managing the protected areas and expansion of the current network;
- reducing the negative impacts on biodiversity and its sustainable use;
- improving regulatory framework for ensuring the sustainability of biodiversity;
- increasing public participation in biodiversity conservation at the national and local level;
- developing collaborative management in biodiversity conservation;
- providing adequate resources for conservation and sustainable use of biodiversity;
- strengthening institutional capacities in the planning, management and use of biodiversity.

SECTION V. DESCRIPTION OF NATIONAL CONTRIBUTION TO THE IMPLEMENTATION OF TARGETS OF GLOBAL STRATEGY FOR PLANTS CONSERVATION

Interconnection between 16 targets of Global strategy for plants conservation, 20 targets adopted in Aichi and National targets in the field of biological diversity developed in the Republic of Azerbaijan is shown in the following table:

Updated targets of Global strategy for plant conservation (GSPC) for 2011-2020	Global Aichi Targets on conservation and sustainable use of biodiversity	National targets on conservation and sustainable use of biodiversity
1: Creation of an online flora of all known plants	19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and development trends, and the consequences of its loss, are improved, widely shared and transferred, and applied	By 2020 reflection of the issues related to biodiversity and ecosystem services at all levels of education, mobilization of the required resources and increasing the knowledge of the relevant staff.
2: An assessment of the conservation status of all known plant species, as far as possibly, to guide conservation action		
3: Receipt and maintenance of free access to information on methods and results of studies directed at implementation of the Strategy		
4: At least 15 per cent of each ecological region or vegetation type secured through effective management and/or restoration	5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas,	By 2020 Increasing the effectiveness of protection of environment and biodiversity By 2020 improvement of the status of rare and threatened flora and fauna species in the Republic of Azerbaijan as a result of conservation and sustainable use

	<p>especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes</p> <p>15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification</p>	
<p>5: At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity</p>	<p>11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider</p>	<p>By 2020 conservation of genetic systems in agro-biological diversities and of genetic diversity of cultured plants and domestic animals including species and varieties having economic and cultural values</p>

	landscapes and seascapes	
6: At least 75 per cent of production lands in each sector managed sustainably, consistent with the conservation of plant diversity	7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity	By 2020 conservation of genetic systems in agro-biological diversities and of genetic diversity of cultured plants and domestic animals including species and varieties having economic and cultural values
7: At least 75 per cent of known threatened plant species conserved in situ management of them	12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained	By 2020 improvement of the status of rare and threatened flora and fauna species in the Republic of Azerbaijan as a result of conservation and sustainable use
8: Conservation of at least 75 per cent of threatened plant species in ex situ collections, preferably in the country of origin, and at least 20 per cent available for recovery and restoration programmes	12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained	Developing and effectively managing the protected areas and expansion of the current network
9: 70 per cent of the genetic diversity of crops including their wild relatives and other socio-economically valuable plant species conserved, while respecting, preserving and maintaining associated indigenous and local knowledge	13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity	Developing and effectively managing the protected areas and expansion of the current network
10: Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded	9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their	By 2020 improvement of the status of rare and threatened flora and fauna species in the Republic of Azerbaijan as a result of conservation and sustainable use

	introduction and establishment	
11: Elimination of threat from international trade by wild flora species	4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits	By 2020 improvement of the status of rare and threatened flora and fauna species in the Republic of Azerbaijan as a result of conservation and sustainable use
12: All wild harvested plant based products sourced sustainably	4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits	Sustainable Use of Natural Resources related to Biodiversity and Ecosystems

<p>13: Indigenous and local knowledge innovations and practices associated with plant resources maintained or increased, as appropriate, to support customary use, sustainable livelihoods, local food security and health care</p>	<p>18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.</p>	<p>Development of state Increasing the level of participation of the public and civil society in protection of biodiversity as well as in the decision-making process at national and local level according to the requirements of Aarhus Convention</p>
<p>14: The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes</p>	<p>1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably</p>	<p>Bringing the regulatory acts on protection of biodiversity in line with the EU Directives</p>
<p>15: The number of trained people working with appropriate facilities sufficient according to national needs, to achieve the targets of this Strategy</p>	<p>20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties</p>	<p>Developing collaborative management in biodiversity conservation</p>

<p>16: Institutions, networks and partnerships for plant conservation established or strengthened at national, regional and international levels to achieve the targets of this Strategy</p>	<p>17: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.</p>	<p>Improvement of legislative acts concerning directly or indirectly to biodiversity in relation to sustainable use of biodiversity and ecosystem services</p>
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SECTION VI. ADDITIONAL INFORMATION ON THE CONTRIBUTION OF INDIGENOUS PEOPLES AND LOCAL COMMUNITIES TOWARDS ACHIEVING NATIONAL TARGETS ON CONSERVATION AND SUSTAINABLE USE ADOPTED IN AICHI. GENDER: THE CONTRIBUTION OF LOCAL COMMUNITIES, INCLUDING WOMEN IN THE CONSERVATION OF BIODIVERSITY

The family policy to implement the family institution to promote the national and moral values to the young generation to be vaccinated, as well as women's participation, and participation in order to raise the governments capacity, taking into account the municipal authorities in conjunction with the 2017 since the start of the "Family Academy" continues successfully. This year, activities were held in the regions with the participation of the district executive authorities and local self-government bodies. At the same time young people, especially young families, people with low social participation have benefited from the events.

At the initiative of the Family and Children Committee together with the Ministry of Health and the Ministry of Education with the participation of experts in the field of secondary education in Baku for the promotion of healthy lifestyles among young people and adolescents, youth training in family life, actions have been implemented. Events held on the subject, "the Family" film festival presented films were shown.

During 2019, most of the educational institutions, "Reproductive health and family planning: problems and solutions", "health foundation Breastfeeding habits promotion", "Non-communicable diseases prevention and risk factors to remove the name of a healthy lifestyle," Activities on "Strengthening the work on reproductive health and early marriage and informing about the consequences of early marriages", "The negative effects of smoking and drugs on the human body" were held.

UN General Assembly resolution of 20 September 1993 and 15 May, respectively, around the world, "International Family Day" is celebrated as. Since 2008, In Azerbaijan, "International Family Day" on the eve of the Republic in all regions and in the capital, members of the community a variety of events, campaigns, conferences have been implemented. To this end, dedicated to the 100th anniversary of the Azerbaijan Democratic Republic in Guba 11th "Family Day" event was held. During the event, the winners of 6 nominations have been held successfully in competition.

State Committee for Family, Women and Children Affairs and the President of Azerbaijan at the Knowledge Foundation, organized by the family reading tradition of

promoting and strengthening reading through the family's social and psychological functions, consolidating, artistic, modern, scientific and popular literature, young people and parents to promote, as well as leisure meaningful, cost-effective and The "Family Library" project has been launched to properly regulate it. The project also connects families to form a family culture of reading through the family as a place of libraries under the "family club" is designed to organize. In this regard, the Committee, the Science Foundation under the President of the Republic of Azerbaijan and the Central Scientific Library of the ANAS held a conference titled "The role and role of reading in enhancing the social and psychological functions of the family" at the Central Scientific Library.

During the year a number of meetings, conferences and studies were conducted to implement the state women's policy.

State Committee for Family, Women and Children Affairs jointly with the Ganja City Executive Authority held a conference entitled "The Voting Rights of Women in Azerbaijan: History and Modern Women's Movement", dedicated to the 100th anniversary of the Azerbaijan Democratic Republic. During the conference Azerbaijan awakened at the beginning of the 20th century, women during the Azerbaijan Democratic Republic, the Azerbaijan Democratic Republic and the youth, the Armenian separatism in the Karabakh region of the Azerbaijan Democratic Republic in 1918-1920, the Heydar Aliyev and the People's Republic of Azerbaijan, the national liberation movement in Azerbaijan. Reports were made on the Ganja period of the Republic and other issues.

An event dedicated to the "100th Anniversary of Giving Election Rights to Azerbaijani Women" was held on March 8. In the official part, a letter of congratulation from the head of state to the women was presented and a number of women were given the Presidential awards. Well-known intellectuals have been rewarded by the Committee.

The Mashtaga Culture House hosted events with students, teachers and parents at secondary schools in Sabunchu district. At the event, educational booklets on the issues of girls' education, violence, reproductive health, early marriage and its complications, drug addiction and its complications were distributed.

Awarding ceremony of the research and writing competition "Women shedding light on the republic" was held. 95th anniversary of national leader Heydar Aliyev and the organizers of the competition dedicated to the 100th anniversary of the Azerbaijan Democratic Republic - The New Azerbaijan Party Women's Council and the National Heritage Cultural History Research Foundation under the foundation of the "Light-woman" has been a magazine. In total, 67 articles were published in 98 collections from 98 people who took part in the competition and this book was also presented to the participants of the event.

At the same time, the Committee held the V Forum of Women dedicated to the 100th anniversary of the granting of suffrage to Azerbaijani women. The forum was held in 2 parts. The first part of the forum was plenary and part 2 was entitled "Women in Economics: New Opportunities and Challenges", "Women and ICT: Realities and

Prospects", "Women and Food Security in Ecology", "100 Years of Equality and Modernity". continued with panels on topics.

Women's Resource Center in Neftchala region's business incubators dedicated to the creation of economic violence prevention and the action carried out. The purpose of the event is to prevent economic violence as a form of domestic violence, the challenges faced by women starting businesses in the regions and their elimination, improving the financial literacy of women starting new businesses, developing business plans, and strengthening existing female business entities. A conference titled "No one is left out: End violence against women and girls!" Was organized by the United Nations Office in Azerbaijan and the Committee.

At the same time, the Committee jointly with the Garadagh District Executive Authority held an event dedicated to the International Girls' Day at Fatmai village secondary school in Absheron district. The participants dropouts girls' education, reproductive health, early marriage and its consequences have been informed about and discussed subject.

The event was dedicated to the results of the writing contest "Woman of Azerbaijan: History and Modernity" among journalists. The contest includes about 50 articles. The content of the writings, historical data and facts, the level of professionalism, the importance of the topic for the reader and the degree of awareness were evaluated. The main purpose of the event is to demonstrate the role and importance of women in the field of innovation and creativity and support for innovative and creative women. The Committee jointly with the Embassy of the Swiss Confederation in Azerbaijan, the United Nations Development Program (UNDP) and the Population Fund (UNFPA) presented a gender assessment report entitled "Women in the Private Sector in Azerbaijan: Opportunities and Challenges". An exhibition of products and handicrafts by women entrepreneurs was also organized.

In 2011-2018, the number of women participating in trainings and events was 5,500. During this period, the number of centers was increased to 8. In the past period, 102 women have started entrepreneurship, while about 50 women have been provided with additional food.

In 2018, the number of women and young people participating in trainings and events was 994, and this year the Women's Resource Center was established in Gusar, Zagatala and Khazar districts of Baku. This year, 28 women have started entrepreneurship and 17 women have been employed.

The Committee, jointly organized by the Association for the Development of Women's Entrepreneurship in Azerbaijan, held a conference on "New Opportunities on the horizon: Green Light for Women Entrepreneurs." The purpose of the conference is to support women's entrepreneurship and to create new opportunities for them. During the conference, the 13th exhibition "Lights, Handwork" was organized by the ladies.

The state has implemented a number of measures towards child policy. Some results have been achieved to ensure that children have the ability to express themselves freely, to participate actively in the protection of their rights and interests in society, and to have a meaningful leisure time.

Draft National Strategy of the Republic of Azerbaijan for 2018-2028 in accordance with the Development Concept "Azerbaijan 2020: Looking into the Future" approved by the Decree of the President of the Republic of Azerbaijan dated December 29, 2012 prepared. These activities are important for enhancing the social participation of children, ensuring the right to participate, and developing leadership skills.

Members of the Coordinating Council of the Fourth National Forum of Azerbaijani Children held trainings on Child Rights.

The Committee jointly with UNICEF held a roundtable on "Children's Rights: Equal Opportunities" with the participation of representatives of government and non-governmental organizations, and gifted children. Children who take part in the round table on the issues of interest to them and officials made speeches and answered questions from the children. With the support of the UN Children's Fund, four social workers have been involved in the work of the Commission on the Protection of Juveniles and Rights under the Executive Power of Gazakh and Agstafa District for three months from July this year. During the project, the Commission staff worked closely with social workers, furthered their knowledge and skills in social work, and continued working with children from vulnerable groups. Within the 3-month project, 104 families were involved, and 141 families were visited by social workers. A total of 316 beneficiaries benefited from the project in the first month of the year, including 140 direct and 176 indirectly. Of the beneficiaries, 159 were children, and 16 were disabled.

December 3 is celebrated as International Disability Day around the world. In order to provide cheerful mood for children in need of special care and efficiently organize their leisure time, the Committee held a meeting with children from the "Mushvig" Public Association for the assistance to children with disabilities and children attending Baku Oxford School.

Rehabilitation of children with special needs and disabilities, and their equal opportunities with other citizens to participate in all areas of public life is one of the priorities of the Committee.

President of Azerbaijan Republic on May 8, 2012, approved by the Decree of the "Children's rights, implementation of the state control procedure," according to the Cabinet of Ministers as well as the Minors and Protection Commission under the instruction of Education, Health, Interior, Labor and The monitoring team, consisting of employees of the Ministries of Social Protection, Youth and Sports, Committee, Executive Power of Baku, has conducted monitoring of the orphanage No 1, Children's Residential Center of the NGO Union of Children of Azerbaijan, kindergarten No 60. The monitoring team evaluated the state of child care, upbringing, nutrition, integration and rehabilitation of the child, as well as recommendations for the development of the facility, as well as recommendations on enterprise development.

Each year by the Committee on June 1 - International Children's Day will be a series of events dedicated to children. The Committee jointly with the Parliament and UNICEF organized a roundtable on "My voice is my rights". The event was attended by about 80 children who were active in child rights activities during the year with members of Parliament. Members of the Parliament answered the children's questions.

At the same time, the Committee jointly with the Main Department of the Penitentiary Service of the Ministry of Justice regularly holds meetings with convicted mothers to protect the children's rights. The next event, the "Union " charitable organization with the participation of children in boarding schools and orphanages, a meeting was held with their mothers in prison. The purpose of the meeting is to promote parental responsibility among convicted women, provide them with moral support, and give children a festive mood.

The ASAN Volunteers' Youth Public Union has appealed to the Committee to support the Child Protection Training Program implemented by the country to protect children's rights and develop children in this area. The project aims to raise awareness of the child rights of ASAN Service staff as well as volunteers in the service, to develop skills in training them on the UN Convention on the Rights of the Child, and to provide training of trainers to other persons - parents, youth and children. In the first phase of the project, an international expert provided training to the Committee's staff as well as social workers from non-governmental organizations on the UN Convention on the Rights of the Child. In the next phase of the project, the staff of the Committee conducted trainings on child rights for ASAN Service staff in November-December, and provided information on children's legislation, state child policy in Azerbaijan and perspectives in the current field.

The Committee regularly carries out measures to inform the public about the genocide crimes committed against our people, the Armenian atrocities, the people who were killed and injured during the occupation. In this regard, the 26th anniversary of the Khojaly genocide by the Committee "Children and War" event was held. During the event on the subject of children who are citizens of Azerbaijan and foreign countries demonstrated a composition prepared by the initiative. During the event on the subject of children who are citizens of Azerbaijan and foreign countries demonstrated a composition prepared by the initiative.

"Justice for Khojaly" international campaign committee under the IDEA Public Union joint initiative of the Ministry of Ecology and Natural Resources, with the support of the Executive Power of Sabunchu district of Baku, Sabunchu district, 63 children died as a result of the Khojaly genocide was held in memory of the tree-planting campaign.

On the eve of the International Day Against Cancer in the World, a joint show with the Committee and the National Oncology Center was organized to provide 50 children aged 1 to 17 who received treatment at the Center with a fun show.

The Committee and the Binagadi District Executive Authority organized the final stage of the intellectual game "To the Victory", dedicated to the memory of the Honored Scientist, prominent ophthalmologist, academician Zarifa Aliyeva. The purpose of the game is to give children the opportunity to demonstrate their knowledge and skills, to learn more about our country, its history and culture, as well as to introduce our scientists, intellectuals and scientists who have played a great role in the development of our country. The fight for the Cup was organized to cover the children living in our village and villages.

Also, during the current year the Committee has been cooperating with the media effectively and has conducted a number of studies. The Committee has been working

on mass media, internet sites and broadcasts to protect children from harmful habits, marriage contracts, alimony, adoption, paternity leave, domestic violence, parental responsibility, DNA analysis, parenting issues, and many marital issues. , interviews were given.

"Family, Women and Children magazine" number in the next 22 and 23 of the two points, "Women's rights: international and national aspects" book was published. Book university students and young researchers who conducted research for the protection of women's rights, academics and journalists, is designed for.

As a result of the joint cooperation of the Committee and the German Society for International Cooperation, it has prepared a guide called "Leadership Guide" for women represented in local politics.

The EU project "CEDAW in Action" - Civil Society and the National Women's Facility Infrastructure and resource documents for the creation of "The Gender Focal Resource Kit" developed.

Since October 2018 the EU-funded "gender-based violence and violence against children in the local monitoring groups" of the needs assessment and the future of the Twinning project with the development of prevention of domestic violence in the strongest defense system in order to establish participation of international experts in the relevant meetings were held with the authorities.

A resolution drafted by the Council of Europe Committee of Ministers on the fight against sexism was developed by the Council of Europe's Directorate for Democracy in 2017-2018.

According to the recommendations of the UN Committee on the Rights of the Child, the Parent Control and Internet Security program (kidsafe) was established on the initiative of the Committee within the framework of the project "Internet Safety for Children".

The committee's social networking sites, including facebook, youtube and twitter, have been featured on video and video clips promoting human rights, particularly women's and children's rights, increasing transparency in public services, preventing corruption, and more.

A social book on the topic "Prevention of domestic violence against children" was prepared. The social wheel provided information on the activities and projects of Azerbaijan, Paraguay, Ukraine, Georgia, Uganda and the Palau Islands, and highlighted key areas in the prevention of violence against children.

At the same time, Gender Equality and Gender Relations in Azerbaijan: Current Situation and Opportunities A report on the results of the "Men's Gender Equality Survey" (IMAGES) has been prepared.

Regional centers to improve the activities of the Committee, in order to improve the quality of workers in January, February and March all visits to the centers have been monitoring, evaluation report, prepared monthly meetings with the leaders of the center, staff members were trained on the results of monitoring. During the year 20748 people benefited from the work of 11 of the Children and Family Support Centers.

"Internally displaced communities, sexual and gender-based violence prevention and response" project on domestic violence requests more promptly response and

abuse recurrence prevention of Sabunchu and Binagadi districts of working-level monitoring teams from the state bodies a network of employees.

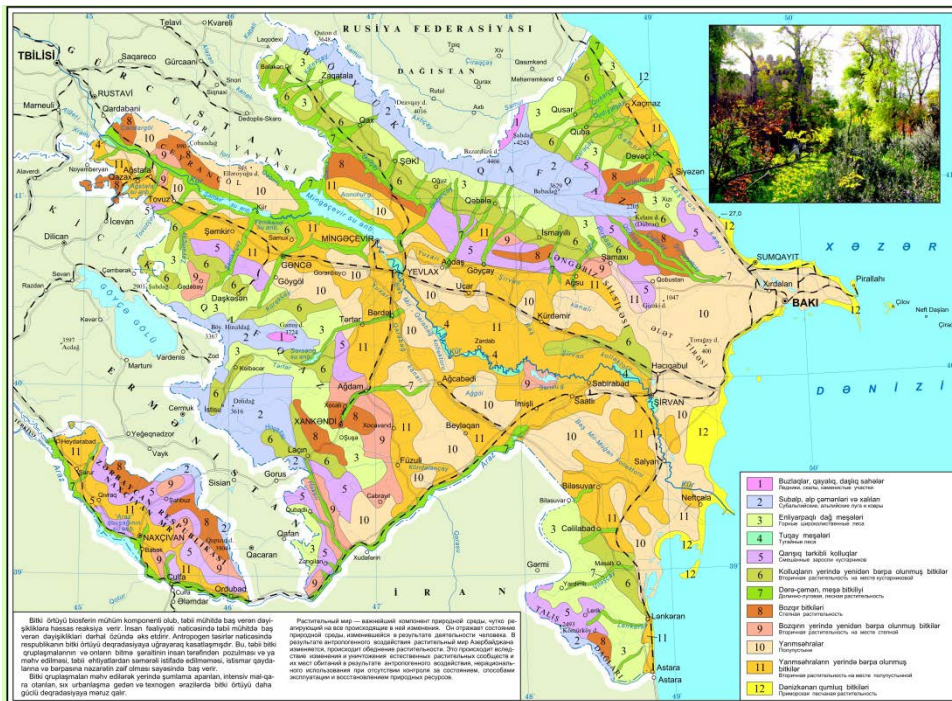
With the support of the German Society for International Cooperation (GIZ), 500 copies of the Gender Equality Legislation Collection have been issued as part of the regional program “Supporting Legal Approach to European Standards in the South Caucasus”.

Also in the current year, the Committee has worked to establish close cooperation with relevant authorities of a number of countries, as well as to develop relations with international organizations and has been working with the UN Children's Fund, the Population Fund, the Food Fund, the UN Economic Commission for Europe, the UN. Development Program, UNESCO, Asian Development Bank, Islamic Cooperation Organization, International Committee of the Red Cross, International Organization for Migration, US Agency for International Development (USAID) and others. cooperated with organizations. At the same time, a number of measures were implemented to implement state programs and national action plans during the current year.

SECTION VII. UPDATED INFORMATION ON COUNTRY BIODIVERSITY.

Azerbaijan Republic is a member of the Biodiversity Convention obligations arising from the implementation of the potential for increasing the national needs assessment, 5th report, during this period, the achievements and the Aichi targets to achieve the country's implementation of measures condition evaluation of the 6th National Report of the main objectives

Ecosystems



Forest ecosystems

Over the past 15 years, the area covered by forest has increased from 989,000 hectares to 1 million 21,000 hectares, which means an increase of 11.7% to 11.8% of the forested areas of the Republic. Various building and furniture materials are made from wood plants. The hornbeam (Carpinus), Georgian oak (Quercus iberica), yew (Taxus baccata) and others. valuable trees and shrubs are widespread in Azerbaijan. Fourth National Report to be submitted to the Secretariat of the Convention so far, the forest ecosystems of the Republic of Azerbaijan registered no change.

	2005	2010	2015	2016	2017
The remains of the wood cutting areas,m ³ : Ready wood - total	3	508	-	1527	-
including working wood	-	6	-	-	-
The total volume of trees on the stem	243	-	2895	3293	-
a wood that is suitable for him	243	-	2681	2862	-
including working wood	-	-	-	-	-
Clean cutting areas, ha	308	301	2154	1798	2104
cleaned it	244	287	2015	1468	1723
Supply of fuel for fuel , m ³	31525	41817	34576	32305	39344

Removal of firewood and fragmentation of forest areas

The wetland ecosystem

Since the submission of the Fifth National Report to the Convention Secretariat, no changes have been observed in the marsh ecosystems of the Republic of Azerbaijan.

Wetland ecosystem

No changes have been made to wetlands ecosystems in the Republic of Azerbaijan since the submission of the Fifth National Report to the Convention Secretariat.

The plains and desert ecosystems

No significant changes have been made to the Plain and Desert Ecosystems of the Republic of Azerbaijan since the submission of the Fifth National Report to the Convention Secretariat.

Seaside and marine ecosystems

No changes have been made to the Seaside and Marine Ecosystems of the Republic of Azerbaijan since the submission of the Fifth National Report to the Convention Secretariat.

High Mountain Ecosystems

These ecosystems occupy 10% of Azerbaijan's territory. Their absolute height ranges from 2000-4500m and more. No changes have been made to these ecosystems since the submission of the most recent report.

Food Plants

A number of plants are used in Azerbaijan as food sources. The main types of plants and their uses are shown in the table below. Some of the wild plants used in Azerbaijan as fruits and vegetables, such as rosemary, plum, corn, edible, strawberry (*Fragaria vesca*), Russian cherry (*Grossularia reclinata*), chicory (*Hippophae rhamnoides*), apple, lilac, *Prunus spinosa*), Grubus (*Rubus caesius*), (various representatives of the *Rubus* genus), hips (*Rosa* spp.), Wild species of onion (*Allium sativum*), such as wild garlic (*Allium sativum*).

The main types of plants and their use

Spread name	Scientific Name	Usage
Chestnut	<i>Castanea sativa</i>	The fruit is roasted and eaten raw, the chestnut flour is extracted from the fruit and mixed with wheat flour.
Hazel-nut	<i>Corylus avellana</i>	The fruit is roasted and eaten raw. In the manufacture of confectionery, especially candy, cake, etc. It is widely used.
Peanuts	<i>Fagus orientalis</i>	The fruit is used as a seed and valuable peanut butter is obtained.
cedar	<i>Tilia caucasica</i>	Flowers and leaves are used for making soft drinks. Honey bee is a valuable herb for making juice.
shepherd's purs	<i>Capsella bursa pastoris</i>	The young leaves are made soup and borscht.
Millet	<i>Echinochloa oryzoides</i>	Dissolved rootstock is put in acid and used.
Ferula	<i>Prongos ferulaceae</i>	Eat when cooked and put in acid.
Heracleum	<i>Heracleum trachyloma</i>	The leaves and stems are used.

Oxyria	<i>Rumex</i> spp.	The leaves and stems are used.
Leeks	<i>Capparis herlacea</i>	The acid made from bud
Saccharum officinarum	<i>Sorghum saccharatum</i>	Used in the production of molasses.
Millet chicken	<i>Echinochloa crusgalli</i>	People use it as food (America).
Milium	<i>Milium effusum</i>	It is used for baking bread.
Tzatziki	<i>Chaerophyllum aureum</i>	It is cooked and used as a meal.

The use of plants as medicines

The flora of the Republic of Azerbaijan is used for the preparation of oils, condiments, syrups and syrups. In Azerbaijan, 150 species of herbs are used in pharmacology, and the number of medicinal plants is 800. They are high octopus - *Inula helenium*, *Orchardum vulgare*, Ordinary Plum - *Tussilago Farfara*, Medicinal Cats - *Valeriana officinalis*, Sandy Flower - *Helichrisum arenarium* and others. it is widely used. These plants produce 33 names. Cooling oils are produced from seeds and grains of cereal plants (walnuts, pistachios, hazelnuts, peanuts, grapes, tomatoes, pomegranates, dill, strawberries, herring, garlic, pumpkin, peach, apricot, cherry). Expanding the cultivation of medicinal and cereal crops for the protection of these plants is desirable. Medicinal herbs are packaged in a dried state and produced mainly by Azerfarm LTD. As well as other drug-producing enterprises of cereals and seeds (walnuts, pistachios, hazelnuts, grapes, tomatoes, pomegranates, etc. cold pressing method, 21 kinds of products including mulberry, hips, medlar as the wild plants, the food product molasses is produced.

Plant species used in foreign trade

Many plants found in the flora of the Republic have attracted foreign businessmen and as a result some valuable plants continue to be exported to foreign countries. The *Glycyrrhiza glabra* (licorice), *Tilia cordata* (linden), *Phragmites australis* (reed), *Arundo donax* (reeds), *Urtica dioica* (nettle), *Betula* sp. (species of breeder species) and so on. can be shown. Export of plants to foreign countries is regulated by appropriate permits (licenses) issued by the relevant authorities. The population of Nakhchivan Autonomous Republic uses plants for medicinal, fodder, wood, dye and other purposes. Most of the plant species collected are rare, endemic, and endangered. Most of the plants are used in folk medicine in Nakhchivan (up to 750 species). Accumulation of some natural plant raw materials is widespread. Some of them are

currently cultivated (Scientific Production Production Cooperative “Loghman”) and are expected to expand in the future.

Some plants are an important source of nectar for wax and honey, while others are used for making natural tea and soft drinks. Some of the herbs are used as fodder and nutrients (both raw and cooked). Most of the plants are an important source of aromatic substances and ethers. *Carpodium platycarpum*, which is only grown in Nakhchivan, is a source of camphor oil and other sugars, which have potential medical and economic value. Industrial production of essential oils can be organized in Nakhchivan. Other species mentioned are bare sweet *Glycyrrhiza* (*Glycyrrhiza glabra*), and decorative lilies and Caucasian oak (*Quercus macranthera*).

Hunting

Some types of mammals (rabbits, foxes, jackals, raccoons, Dagestan species, wild pigs) and birds (ducks, geese, turtles, beetles, pigs, pheasants, etc.) are traditionally used in hunting farms. In recent years, there has been a growing interest in the hunting of some representatives of the Azerbaijani fauna (Dagestan tour, wild boar, etc.) by foreign tourist-hunters. In order to regulate such hunting, the Ministry of Ecology and Natural Resources issues appropriate permits for hunting.

Use of biodiversity for biotechnology and genetics purposes

Biodiversity in biotechnology is used for scientific and industrial purposes. For scientific purposes, biotechnological methods are carried out on the one hand, preserving, reproducing cultural and wild species of biodiversity, reproducing and reproducing plants under threat of depletion or growing in vitro, and on the other hand, in vitro plants are a useful research object. used in the work. In the laboratory, tomato, tobacco, hard and soft wheat varieties, various hybrids, barley, rye, clover, carnation, rose, grape varieties were obtained in culture or microclonal. In the genetics, wild-type biodiversity is used to identify the origin of genotypes formed during the evolution of cultural plants and to hybridize wild-growing plants.

Agrobiological diversity

The Ministry of Agriculture has the following research institutes that conduct research in the field of selection and protection of agri-biodiversity: Agriculture (cereals and legumes, tobacco), Vegetable (vegetable and melon crops), Gardening and Subtropical Plants (fruits and berries, subtropical plants); Viticulture and Winery; Fodder, Lawn and Grazing (forage production and pasture use); Cotton (cotton). In addition, applied studies on biodiversity of forests and fish are conducted at the Institute of Forestry and Fishing of the Ministry of Ecology and Natural Resources. The species used in agriculture and their wild ancestors are widely represented in the country.

Cultivated crops of cereals

There are 454 varieties of Poaceae in Azerbaijan, of which 25 are cultivated culturally. The following are the types used in agriculture. There are 15 species of wheat (Triticum) in Azerbaijan. Solid Wheat - Triticum Situation There are 43 varieties of solid wheat in the country. Soft wheat - soft wheat of Triticum aestivum are 87 species diversity, indigenous varieties grown over the years, created by the national selection. However, many of them are lost and many are lost (Yellow wheat. White wheat, Pigeon, Red wheat, beardless wheat, etc.). There are 10 species of barley (Hordeum) in Azerbaijan. There are 5 types of rye (Secale) in Azerbaijan. Only one of these (sage rye Secale cereale) is a mine. There is a regional variety (Mirbashir-46). There are 326 triticale samples recorded in the Geno Fund. Only one type of corn (Zea) is spread in Zea mays.

Only one type of corn (Zea) is spread in Zea mays. Zagatala yellow cereal, Khojaly and Khudat white cereal, Tovuz red grain, Guba white cereal and others. varieties have been created, and local varieties of Zagatala, Zagatala-514, Caspian-415, Azerbaijan-3 have been created by hybridization and sampling. There are 90 varieties in the gene pool.

Paddy (Oryza) 1 species - Oryza sativa Sheki-Zagatala region, the Kur-Araz lowland and Talysh are grown. The scientific selection was obtained by the varieties of Aram, Aggilchig-36, Aggilchig-44 and Azros-637. About 80 native species were collected in the gene pool.

Indirect use of biodiversity

There are favorable opportunities for the development of ecotourism, especially bird watching in Azerbaijan. Birds can be observed here both during the winter and nesting. Numerous colonies of heron, larus, grus can be observed in islands and unused oil vessels.

Little bustard flocks, eagle and vultures migrate to plain in winter. Huge flocks of aquatic birds gather on the Caspian shores and inland waters.

Cultural and traditional importance of biodiversity.

Azerbaijan was a rich country of the East with its highly developed economy, cotton and livestock, oil and other minerals from ancient times. The territory of Azerbaijan has also been of great importance as a center of economic and political ties located at the intersection of roads from north to south and east to west.

Azerbaijan has always been a cultural center. Carpets and carpet products made in this land were repeatedly mentioned in many historical and artistic works and examples of oral folk literature. These carpets reflect all the beauty of the colorful nature of Azerbaijan - the blue of the sky, the greenery of the forest, the color of the mountain slopes, and the elegance of the snowy peaks. These carpets combine the colors of red pomegranate and golden quince, yellow saffron and amber grapes. The use of nature resources in the secrets of carpet weaving, production of dye from them, making of yarn from animal wool, selection of tree species for the production of musical instruments and other items passed from family to family, from generation to generation.

Azerbaijan is rich with its dyeing plants. There are 1500 plant species (131 family and 411 class biology)). This includes, Mulberry - *Morus rubrum*, chestnut - *Castanea sativa*, maktura, berberis - *Berberis vulgaris*, Mature walnut tree - *Juglans regia*, Oak species - *Quercus longipes* and so on. There are many species of plants that contain resin. East resin - *Crambe orientalis*, *Astragalus microcephalus*.

Work on reintroducing the European bison to the country has already launched since 2012, to restore the population of endangered species. Initial research and evaluation activities were conducted for the different seasons of the year under the leadership of the MENR with the participation of an international expert and WWF Azerbaijan staff. The eastern and southern slopes of the Greater Caucasus, especially the Ismayilli region of the Shahdag National Park was considered acceptable for the European bison reintroduction as a result of these researches. Gradual reintroduction of European bison to Azerbaijan was launched since 2019.

One of the most purposeful efforts in this direction in our country is to publish the second edition of the "Red Book" in 2013. "Red Book" is an official document and a collection of information on the state, distribution and protection of animals and plants in the entire territory of the Republic and in the Azerbaijan territory of the Caspian Sea.

Decrease in biodiversity results from direct, indirect, open, secret, significant and insignificant impact of people on the natural complex. The inefficient use of water and land resources affects the atmosphere and climatic features. Atmospheric composition and climate changes directly impacts on ecosystem function and reduce biodiversity.

Use of water resources

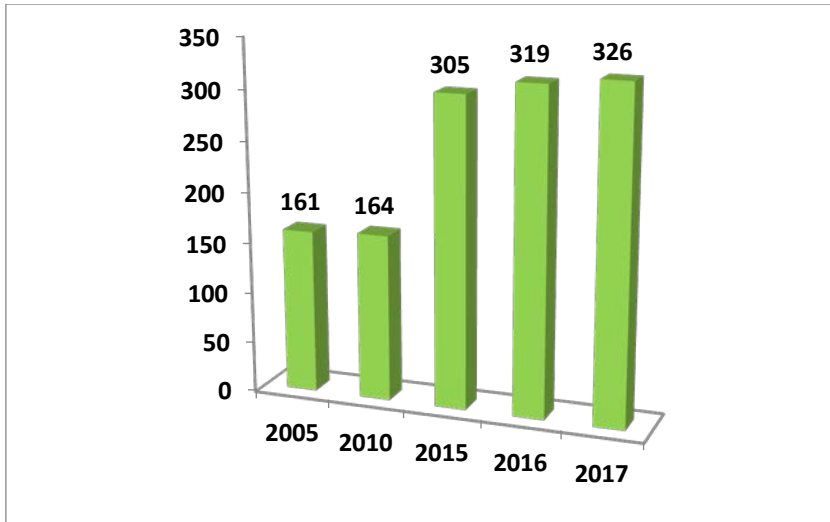
Water resources play an important role in the health and economic activities of the population of country. According to the information from State Statistical Committee, 12781 million cubic meters of water was extracted from natural sources in 2017. This is 1215 million cubic meters or 10.5% more than in 2010. The amount of water per person was 1313 cubic meters in 2017 and 1,295 cubic meters in 2010. The amount of water per person was 1313 cubic meters in 2017 and 1,295 cubic meters in 2010.

9154 million cubic meters of water was consumed from natural sources in 2017. 71.8% of used water was used for agricultural irrigation and other needs, 24.3% for industrial needs, 3.2% for the needs of the population and 0.7% for other purposes.

29.4% of natural water lost in 2016 and 28.4% in 2017 while there is a shortage of water in the country. Losses decreased by 5.8% in 2017 in comparison with 2010.

In 2017, 5,453 million cubic meters of wastewater was discharged, of which 326 million cubic meters were discharged into water bodies and the environment without treatment. Twice more untreated waste water (sewage) was discharged in 2017 in comparison with 2010.

Volume of uncontaminated wastewater discharged to the water basins, million cubic meters



State control over the protection of water resources by the authorities of the Ministry of Ecology and Natural Resources

	2005	2010	2015	2016	2017
Number of inspections - total	394	215	185	191	224
Enterprises that discharge pollutants to the canals, common	145	77	61	104	63
Relative to the number of examined enterprises, percent	36,8	35,8	33,0	54,5	28,1
Number of legal and physical persons brought to administrative responsibility for violation of water protection legislation - total, per person	141	71	46	104	68
Amount of fines, thousand manats	11,2	173,9	68,6	92,0	55,0

Key threats to biodiversity and the impact of disruptive biodiversity and ecosystems on the wellbeing of people in Azerbaijan

Pesticide use and pollution

During the Soviet period, Azerbaijan was one of the big suppliers of Agricultural products to markets of Russia, Ukraine, and Kazakhstan. More than 1 million tons of raw cotton and 3 million tons of grapes were produced in the country. The country's climate is very fertile for dissemination of plant diseases by insects and other pests. Therefore, pesticides were widely used in cultivation of cotton, grapes, vegetables, etc. In 1950s-1990s, cotton plantations covered 100 - 300 thousand hectares and pesticides were applied to protect them (IPEP, 2006).

As one of the oldest oil producing countries, Azerbaijan manufactures a broad palette of agricultural chemicals. The country was one of the main POPs producing and consuming country in the former Soviet Union. POPs include 12 organic compounds: aldrin, chlordane, DDT, dieldrin, dioxins, endrin, furans, heptachlor, hexachlorobenzene (HCB), mirex, polychlorinated biphenyls (PCBs), and toxaphene. In Azerbaijan, these chemicals have been widely used as pesticides and industrial chemicals and still pose risks to human health and ecosystems (MENR 2007).

DDT was used in agriculture as the cheapest and most effective method of controlling plant diseases. Despite the ban of DDT, the soviet government decided to continue use of DDT in Azerbaijan until 1988. It is worth to note that DDT was banned in all over the Soviet Union, except Azerbaijan. In terms of pesticide loads per hectare, Azerbaijan was among leaders in the former USSR.

Household DDT use was very popular in Azerbaijan between 1950-1985. In rural places of Azerbaijan DDT was accessible to everybody. Because collective farms used it, small DDT hills were everywhere and one could pick up DDT for free. DDT was used for household needs to control household pests. Local people liked use of DDT because it was very effective to prevent pests. Unfortunately, health effects of DDT in Azerbaijan are not studied well. Most recent studies show that there are high concentrations of DDT in rural areas, also in Sumgait and the Caspian Sea. In rural areas of Azerbaijan DDT concentrations may reach high rates that are several times much more than maximum allowable concentrations. It is worthy to note that in the 1990s more than 4000 tons of pesticides, including DDT has been taken from the burial site illegally.

In general, there were 19 big inter-district and district chemical supply facilities in Azerbaijan (Figure 1). Credible information shows that there are large amount of DDT and other pesticides in the most of these supply facilities (MIA, 2012). All the chemicals are open to the environment and may easily migrate to residential areas via air, soil, and foods. Many sites are very close to water bodies and winds take powder and dust

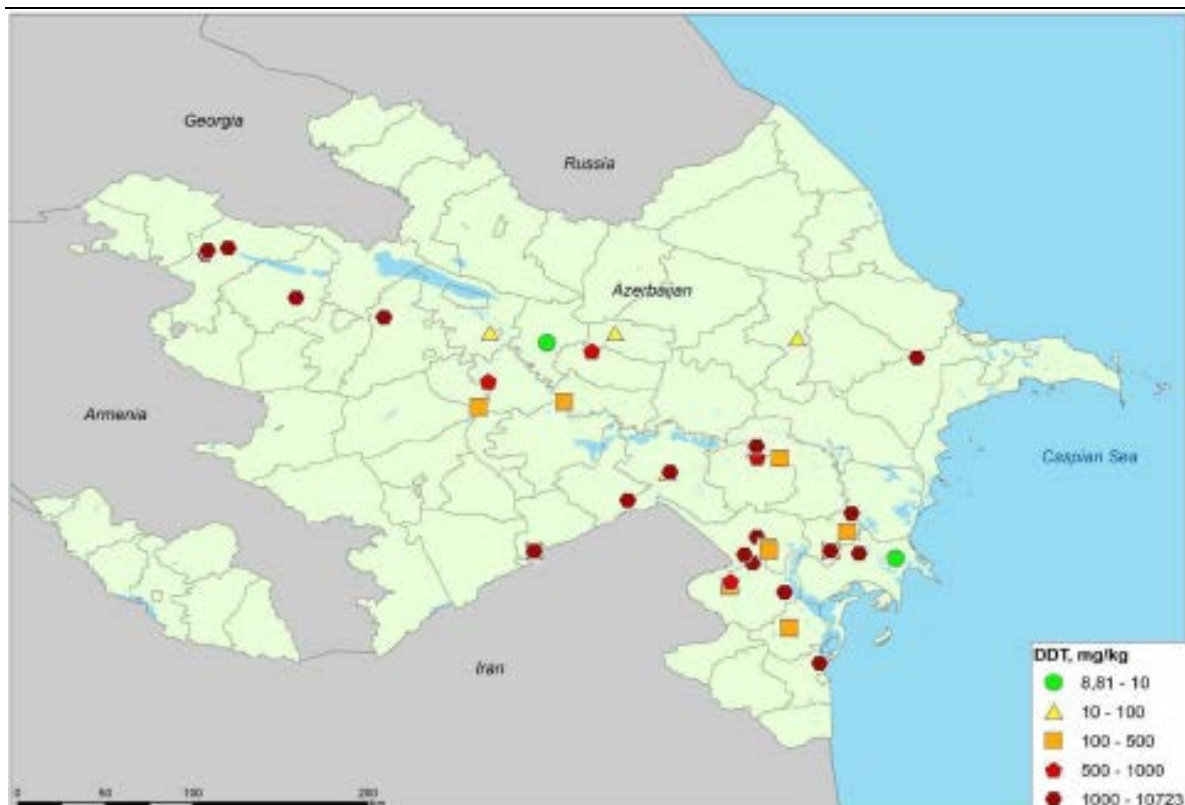
over the houses and water sources very easily. For example, in Horadiz site, one may see animals grazing around the site and children playing. Regular winds take DDTs and other dangerous pesticides over the houses that are very close to the area. Also, through the reservoir and river that are rather close, DDTs may migrate into faraway places. It must also be noted that there is no information about this site in the mass media and internet (Pure Earth, 2016).

Effects of POPs on health of population and the environment are a global issue of concern. These chemicals may accumulate in human body for a long time changing metabolic processes in the body and causing direct and indirect effects on health. As these chemicals move up the food chain they concentrate to levels that are harmful to humans, wildlife, and fish.

Main POPs producing industry is in surroundings of Sumgait city. The Sumgait city was founded in the 1950s as a typical Soviet industrial centre. There was a rapid growth of chemical and petrochemical sectors of industry in Sumgait from 1970 to 1985. Sumgait Surface-Active Substances Plant (SAS) is one of the first chemical enterprises of Azerbaijan. Since 1956, it operated as the chemical enterprise. In 1958 The Sumgait Surfactants Production Plant started to manufacture DDTs and produced 480,549 tons of DDTs until 1980 (Aliyeva et al, 2013). 1000 m² land was used for 22 years for different production operations, associated with production of technical DDT dust. Additionally, 24,000 tons of DDTs were imported from the Russian Federation. More than 500,000 tons of DDT was used between 1958-1988 (IPEP, 2006).

Results of inventory works suggest that about 40-50 ton of DDT is still scattered within the production zone (Pure Earth, 2016). Analytical measurements confirm that content of DDT in the DDT mixed soils sometimes reaches up to 90–92% (MIA, 2012). The studies conducted by Pure Earth (2016) confirm that there is still high amount of the DDT scattered within the huge areas in Absheron peninsula. While the concentrations of DDT in some cases below the recommended levels, it is still one of the main factors that threat to the health of local populations and wildlife. Many studies have also confirmed high level concentrations of organochlorine pesticides (OCPs) and polychlorinated biphenyls (PCBs) in different areas of Azerbaijan (ZEN, 2013); Absheron peninsula including Baku and Sumgait is considered as the main spot of contamination and serve as sources of persistent organic pollutants (POPs) to the local environment as well as to the Caspian Sea (Bickham et al. 2003, Swartz et al. 2003).

Location of DDT pollution sites and concentration of DDT



At the territory of SAS, 1000 m² of area was used for 22 years for different production operations, associated with production of technical DDT dust. A large part of DDT was emitted into the atmosphere through ventilation systems. Over many years of production in the area and mistakes in processing had enabled DDT to penetrate the ground and groundwater. DDT, and other OSPs were spilled into the soil and migrated into areas rather far from the Sumgait. It is highly probable that both the volume of DDT and the areas utilized land within the plant are considerably larger than these initial estimates indicate.

Estimations of Pure Earth confirm that 40-50 tons of DDT have been scattered in the areas close to Sumgait city. Statistics of occupational diseases show that cancer rates among the workers and residents that live close to the factory is very high. Recently, large amounts of DDT found in the Caspian Sea that concentrated in the bodies of Caspian seals, frogs, and sturgeons as well (Matson et al. 2005; Bickham et al. 1998; Kajikawa et al. 2002). POPs pesticides have been identified as a priority problem for the Caspian region (CEP, 2007).

Inventories of DDT sites in Azerbaijan have been prepared. As noted, the inventories showed more than 40 DDT sites and 30 pesticide sites in Azerbaijan included on the list of Stockholm Convention. These sites are located mainly in rural areas of Azerbaijan and pose a threat to natural environment and public health. Unfortunately, there are former pesticide sites that are unidentified and require further investigation and studies.

High levels of DDT were measured in Agjabedi near the former pesticide distribution site. Also, high concentrations of DDE were observed at other urban sites

including Salyan, Ganja and Mingechevir. This case provides evidence that old pesticide storage facilities continue to influence levels in ambient air. The mean concentrations of DDT and DDE in air were 0.03 ng/m³ and 0.29 ng/m³ respectively. High levels of DDT have been measured in coastal sediments of the Caspian Sea, including DDT (0.160– 7.40 ng g⁻¹), DDE (0.110–1.30 ng g⁻¹) and DDD (0.210–3.40 ng g⁻¹) (de Mora et al. 2004), with high levels of DDT components reported in Caspian seals and sturgeon (Aliyeva et al. 2012).

In 1980 SAS started to manufacture all types of hexachloride-cyclo-hexanes, including gamma-Hexachlorocyclohexane (gamma-HCH), known also as lindane. Lindane was known carcinogen, has been widely used in agriculture of Azerbaijan. Between 1951-1978, about 30.5 thousand tons of technical grade lindane was produced, while in the period from 1986 to 1988, only 181 tons of lindane was produced. Lindane production has been stopped in 1988. In 2010 lindane was included to the list of substances defined by Stockholm convention. High level beta-HCH is present in air at relatively high concentrations (>10 ng/g dw) were measured in soil from Khachmaz, Lankaran, and Ganja. High concentrations of gamma-HCH in Sumgait have been reported as well, that may be related to technical lindane production in the area. Unfortunately, there is no information regarding the HCH pollution in Baku (Mora et al. 2004).

As noted, NIP considers inventory, recollection and destruction of obsolete toxic pesticides and agrochemicals. Through the NIP, there was a considerable improvement of the Jangi pesticide burial polygon. Jangi pesticide polygon was constructed in 1989 and in use since 1991. The main purpose of construction was to reduce DDT scattering to environment and reduce health effects of DDT contamination. This site keeps pesticides brought from the different inter-district chemical supply facilities of Azerbaijan. This site is located at 53 km from Baku, in Gobustan district, nearby Jangi village. The site is very close to the main road of Baku-Shamakhi. The distance between the site and Jangi village is nearly 2.5 km. The territory of the site is nearly 12 hectares. There are 298 concrete containers that are fully filled by DDTs, HCH, and calcium Cyanamid and calcium Arsenide (MIA, 2013).

Until 1996 eight thousand tons of pesticides (mainly DDT, HCH and many other POPs) were transferred to the polygon and buried. However, first years the polygon was not managed well. In the past, people got access to the storage bunkers, some bunkers were opened and most the pesticides were released to the environment. Between 1996-2005 local people illegally picked up from polygon more than 4000 tons of pesticides and used (MIA, 2013). Official data says that five bunkers of the storage site contain more than 100 tons of DDT, while the other 177 bunkers contain large amounts of mixtures of DDT and other pesticides. During the 2008-2010 years, more than 3084 tons of toxic pesticide was transferred to the burial polygon. In 2008 2048 tons of toxic pesticides were transferred from Yevlakh, Zardab, Ujar, and Agjabedi sites to polygon. Nearly 1200 of barrel of various liquid toxaphene was repacked and transported to polygon from Ganja site. These pollutants will be kept there until they fully utilized. Also, 113 m³ of DDT polluted soil transported to Ganja from Zardab site. There is still some concerns with Jangi site. A small creek crosses the territory is very close to the site.

This creek is used to provide water for domestic animals. Nearby territories are used as winter pastures and open to domestic animals. The site is in high elevation and rain may easily wash contaminants, releasing them into the small stream that is used by domestic animals. Heavy smell of DDT in nearby areas is strongly felt. There are very big cracks on six concrete containers. Through these cracks very strong smell of pesticides is felt.

Many DDT sites in Azerbaijan are still not detected. These types of sites are in small villages and remote areas, mainly had no buildings and in most cases pesticides were stored under open sky. In most cases, these pesticides were simply buried that can be seen only after excavating.

These kinds of sites have easy pathways contaminants may go to human body. Many of these areas are used as pastures and agricultural fields (MIA 2012; Pure Earth 2016).

PCBs use and pollution

Although there was no PCBs production in Azerbaijan, the country has, however, imported and used PCB-containing oil and equipment in the past and it has to deal with the consequences. PCB containing equipment and maintenance oil was imported from Russia and neighbouring countries. Environmental concerns in Azerbaijan from PCBs have been caused by accidental releases, careless disposal practices, and leaks from industrial facilities or chemical wastewater disposal sites (UNIDO-GEF, 2004).

The National Implementation Plan (NIP) for the Stockholm Convention 2007-2020 considers the possibility of replacing and destroying PCB-contaminated materials (MENR, 2007). As a part of NIP, the GEF funded UNIDO project was implemented to reduce PCBs pollution in Azerbaijan. The project's overall objective was to create capacity for management of PCBs and prevention PCBs releases from electrical equipment. The project is implemented with the Ministry of Ecology and Natural Resources focusing on the power sector is working to help Azerbaijan disposing of PCB oils. As a result of the project only some parts of PCB mixed oils were transferred to the landfill and larger part of them is still in use (Marchich and Maryev 2013).

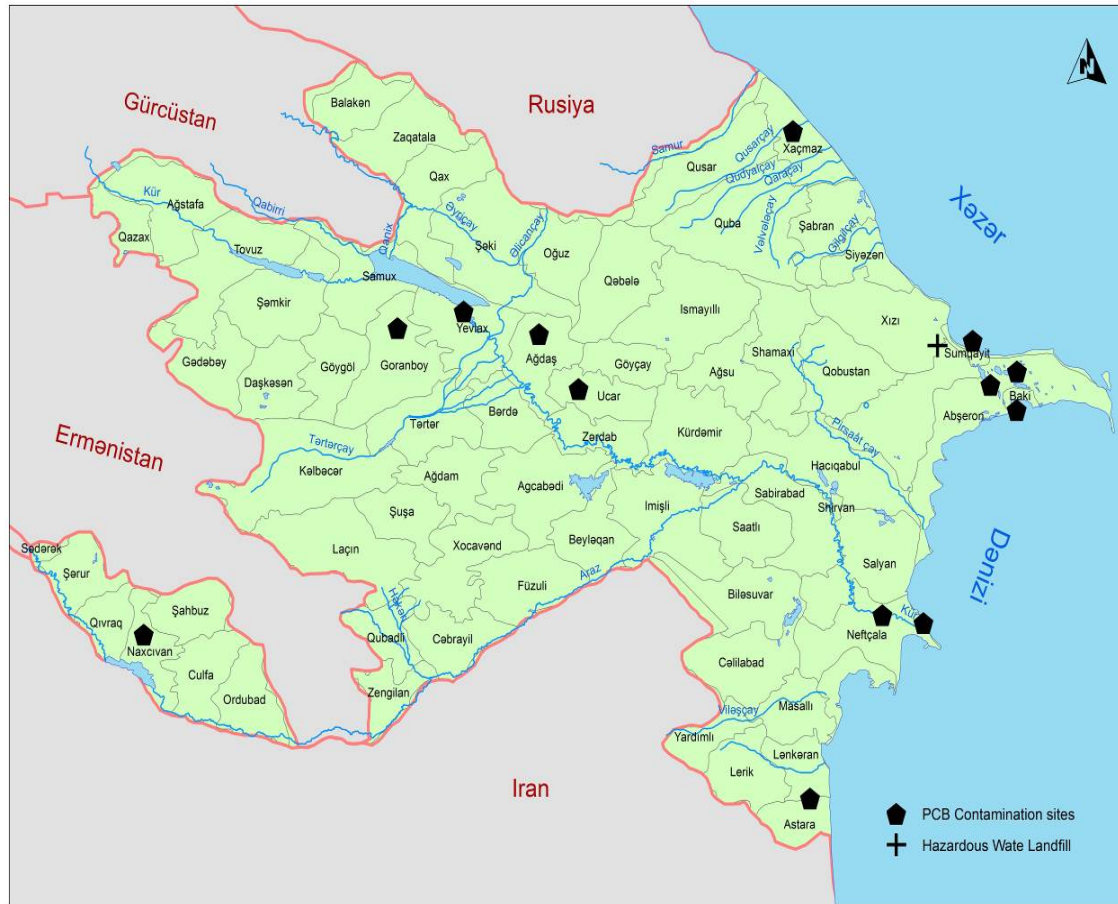
Main stakeholders that own PCB-containing electrical equipment include but are not limited to the State Oil Company SOCAR, Azerishiq electricity distribution company, Ministry of Transport etc. PCB-containing equipment and oil is mainly used in Azerbaijan for the power sector (power generation and transmission). The main owner of the PCB containing transformers is Azerishig and Azerenergy companies, which are the main electricity suppliers of the country. Azerishiq has large transformers in all over the country. The transformers owned by Azerenergy mainly located in areas of power stations. The other largest transformer owner is SOCAR, PCB containing transformers and capacitors of which is located mainly in Absheron peninsula. Many other oil producing operation companies also own devices containing PCB mixed oils (Marchich and Maryev 2013).

In 2013 National Centre for Hazardous Waste Management (Hazardous Wastes Landfill) was built in Sumgait that store and clean PCB containing oils. This facility has devices that enable to store PCB containing oils and clean them. Because of activities conducted through the UNIDO project, 6,326 capacitors have been identified that contain PCBs. Additionally, 4,561 transformers have been investigated to determine level of PCB, among those, 564 pieces have been identified as transformers containing more than 50 ppm chlorine. The PCB inventory showed that the total amount of PCB containing capacitors is 6,074, weight of the oil is 91 tons, and total weight of equipment is 231 tons. In SOCAR the total amount of PCB containing capacitors is 252 pieces, weight of oil is 4.3 tons, total weight of capacitors 12,500 tons. Because of the project, created facilities for PCB contaminated material transportation and interim storage - Transportation of PCB containing materials is implemented using approved guidelines of Hazardous Wastes Landfill. Interim storage of the PCB wastes is located at the territory of Hazardous Wastes Landfill, where the treatment equipment of PCB oils is constructed. UNIDO supported this landfill to obtain devices that enable to clean PCBs from transformer oils. Recently, 540 tons of PCB-containing equipment was transferred to the Hazardous Wastes Landfill located in Sumgait, Azerbaijan. However, most of PCB containing transformers are still in use (Marchich and Maryev 2013).

Results of the inventories show that there are still high concentrations of PCBs in soils of Absheron peninsula (ZEN 2013). Main PCB contaminated hotspots are located in north of Baku, south side of Baku bay, coastal areas in Sumgait, also in Mingechevir, Agdash, Astara, Nachichevan and Ganja (Aliyeva, et al.2012). In most cases the sources of the pollution are the old transformers that has already been repaired and sent back to use again. Broken transformers are the major sources of PCB pollution in the country. Most of the broken transformers are generally recycled and reused after proper repair and the oil and residues are sent back to the oil refineries of the State Oil Company (SOCAR). In Sumgait, total PCBs at 0.26 ppm exceeded threshold of 0.023 (Swarts, et al.2003). Investigations show that PCBs are still used in Azerbaijan as the transformer and capacitor oils.

In accordance with the most recent studies, high concentrations of PCBs were found in Ganja, Zagatala, Sumgait and Baku. In Baku, several PCB polluted sites are around old oil fields, where old and broken transformers were located. Unfortunately, many sites are not detectable due to removal of the PCB containing transformers and capacitors. According to the studies done by Pure Earth/Blacksmith Institute, hotspots of PCB pollution are found near the oil fields of Balakhani and Sabunchu (ZEN 2013, Pure Earth 2016). High concentrations of PCBs were found in the Caspian Sea sediments, in the south part of Baku Bay (Mora et al. 2004). The PCB concentrations in these industrial and urban areas showed a negative gradient traversing from the inshore. In other words, PCB concentrations in inshore areas could be much higher than in the Sea. The 2005 survey identified the highest total PCB level in the Kura River with concentrations of 30.0 and 28.7 ng/g (CEP 2007). The figure illustrates most contaminated PCB sites in Azerbaijan.

PCB contaminated sites in Azerbaijan



Status of lands in Azerbaijan

The total land fund of the country is 8.6 million hectares and ranks first places among the countries with less agricultural lands of the world. Currently, per capita land of this category varies between 0.12-0.14 ha (0.06 ha in Lankaran province) and this is also a very low indicator.

Annual increase of irrigated sown areas (1.3-1.4 million hectares) is associated with climate warming, as well as high productivity in agriculture.

At present, the area of irrigated lands is only 25.2% of the useable land in the country.

Up to 2000 state farms have been privatized and given to the private property of the 800,000 families (2.1 million hectares) as a result of land reform carried out in the country. Negative natural processes (floods, hurricanes, forest fires, drought, landslides etc.) undermine the integrity of the natural landscape complex and it directs its development rate in another direction, undermines and reduces soil and plant diversity.

Caspian Sea level rise resulted with the flooding of most of the lands of the Caspian region. Rising the ground water level in surrounding areas also accelerated the marshy processes (in Astara, Lankaran, Masalli, Neftçala, Siyazan, Davachi, Khachmaz). Kura river level rise resulted with salinization and failure of collector-drainage network in Zardab, Kurdamir, Sabirabad, Salyan and Neftçala regions.

Distribution of common land fund on its appointment, end of year, thousand ha.

	2005	2010	2015	2016	2017
Total land area of the country - total	8660,0	8660,0	8660,0	8660,0	8660,0
As well as: Agricultural land - total	4758,6	4766,8	4769,8	4772,9	4777,5
lands under permanent vegetation	221,5	227,4	237,0	241,1	246,8
soils under permanent grassland and mowing	2693,9	2655,3	2595,1	2532,9	2436,2
Non-agricultural land - total	3901,4	3893,2	3890,2	3887,1	3882,5
As well as: industrial, road and other non-agricultural lands	365,3	350,1	339,5	339,4	340,1
lands of specially protected territories	288,6	393,5	429,9	438,1	438,1
forest areas	1037,8	1040,7	1040,3	1040,3	1040,3
water fund lands	142,5	147,1	148,5	146,3	146,3
Other lands	2067,2	1961,8	1932,0	1923,0	1917,7

The territory of the Republic of Azerbaijan can be divided into 4 groups due to the degree of pollution and ecological condition of the soil, natural landscape and environment:

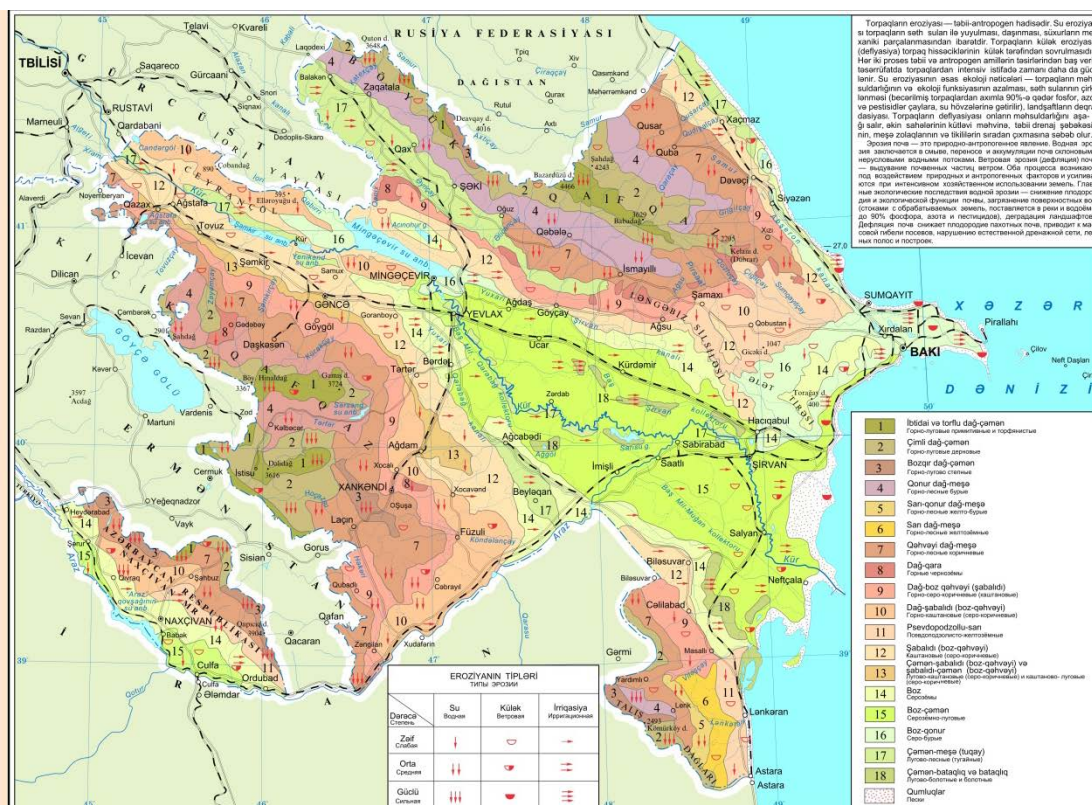
The most technogenically affected areas - Baku, Sumgait and Ganja

Areas under the influence of only one type of production - Dashkesan, Garadagh, Mugan, Shirvan and Mil plains.

Technogenically exposed areas as a result of the consolidation of several industries - Absheron coastal areas, Siyazan-Khudat strip, Sangachal-Neftchala strip

Areas where the impact of public production is not observed - high mountain areas of the country.

Development of the mining industry in Azerbaijan is related with the Dashkesan iron ore, Filizchay polymetallic, alunite and Paraghachay. Degradation processes by anthropological factors has a negative impact on soil-vegetation and cultural farming systems.



Errision of lands

STATUS OF WASTE MANAGEMENT IN AZERBAIJAN

Hazardous waste management

266,000 tons of hazardous waste was generated as a result of production activities of enterprises in 2017 (1.9 times more hazardous waste compared to 2010).

44.7% of waste is generated by mining industry enterprises (most of them are in Baku).

Indicators on the movement of hazardous wastes in the Republic of Azerbaijan,

Years	2010	2015	2016	2017
The amount of generated hazardous wastes	140,0	262,6	632,6	266,0
The amount of used hazardous wastes	5,5	5,2	47,8	5,4
The amount of inactivated hazardous wastes	58,4	210,9	25,9	35,8

Solid wastes management

Prevention of the harmful effects of waste on human health and the environment and their involvement in the economic turnover as recycled raw materials is one of the important issues.

33.4 per cent of 1576,2 thousand tonnes of solid waste generated in 2017 (1,8 thousand tonnes of prior years) was used for energy purposes, 0.5% were sold inside the country and 66.1% were transported to landfills.

170.3 million kWh of electricity was produced due to the use of domestic waste. It contains 65.8 percent electricity produced by alternative energy sources.

The status of atmospheric air in Azerbaijan

The protection of atmospheric air in Azerbaijan is regulated by the Laws of Environmental Protection (1999) and Protection of Atmosphere (2001). Both laws define the framework principles of all environmental regulations and control mechanisms. Law on Protection of Atmosphere (2001) contains 31 articles. Norms on enterprises, vehicles and all sources of air pollution are defined in accordance with this law.

Failure to comply with hunting norms

One of the factors contributing to the decline of species diversity in the fauna is the illegal hunting. Destruction of animals directly or indirectly from anthropogenic impacts and compression of residential areas causes the threat of destruction of predators (marbled polecat, heyna and leopard) and ungulates (gazelles, mouflon, chamois). Some valuable animal species are endangered by illegal hunting despite the fact that several species are allowed to hunt.

As a result of illegal hunting, the total number of sturgeons decreases, the quality structure of its population changes, the age of the migratory breeders decreases, and the percentage of individuals declines. In recent years, positive changes were made in this field. This is primarily due to the adoption of necessary legislative acts to regulate hunting and fishing activities in the country. At the same time, the Ministry of Ecology and Natural Resources is responsible for the control of hunting activities and management of hunting farms and this resulted in effective control over this field. Poor environmental education and environmental awareness resulted in the killing of some dangerous animals, such as snakes (people often kill amphibians and reptiles without distinguishing between toxic and non-toxic species.), and non-compliance with hunting norms and rules.

Number of illegally hunted species in the specially protected natural areas was 153, damage to nature was 6,648 manat and the amount of penalties imposed was 48,400 manat during 2011. However, this indicator for 2012 was as follows: damage to nature was 31411,9 manat and the amount of imposed penalties was 26400 manat. 49 hunting weapons and 119 cartridges were seized from poachers, an act and protocol was drawn up against those persons and a penalty of 37,400 manat was imposed and the amount of claims was 305 manat for illegal hunting in specially protected natural areas and hunting farms during 2013. 101 acts and 60 protocols were drawn up for regions on fauna protection in 2013. A fine of 62790 manat was imposed on 67 cases against legal entities and individuals for the violation of the law. The amount of claims was 3339 manat on 30 cases regarding the damage to nature. 126.77 manat payment was applied for 15 cases. All documents were sent to law enforcement agencies for appropriate action.

73 cases of illegal fishing revealed, 19 acts and 54 protocols were drawn up and 54 person brought to responsibility in 2011. 8 boats, 70 lanes and 740 different kinds of fish were seized from the law violators, 3 cases were sent to the region courts of the Republic, 22 cases were sent to law enforcement agencies and 29 cases were reviewed administratively by the Department. The amount of claims for damage to biological resources amounted to 38,419 manat. In 2013, 79 violations of law were revealed and 53 person were brought to responsibility. 8 cases were sent to the region courts and 16 cases to law enforcement agencies due to their criminal nature. 23 cases were considered administratively by the Department. 7 boats, 184 illegal hunting instrument and 532 different kinds of fish were seized from the law violators. The amount of claims for damage to biological resources amounted to 45,533 manat.

Reproduction of fish stocks in water bodies, breeding of different kinds of fish, protection of the population is one of the measures aimed at sustainable provision of population with food products.

3114,6 thousand manats were spent on the reproduction and protection of significant fish stocks in 2017 (5.9% more than in 2016). 91.8% of this fund were spent on the activities of enterprises on reproduction and 8.2% on the implementation of melioration measures on fishing farms.

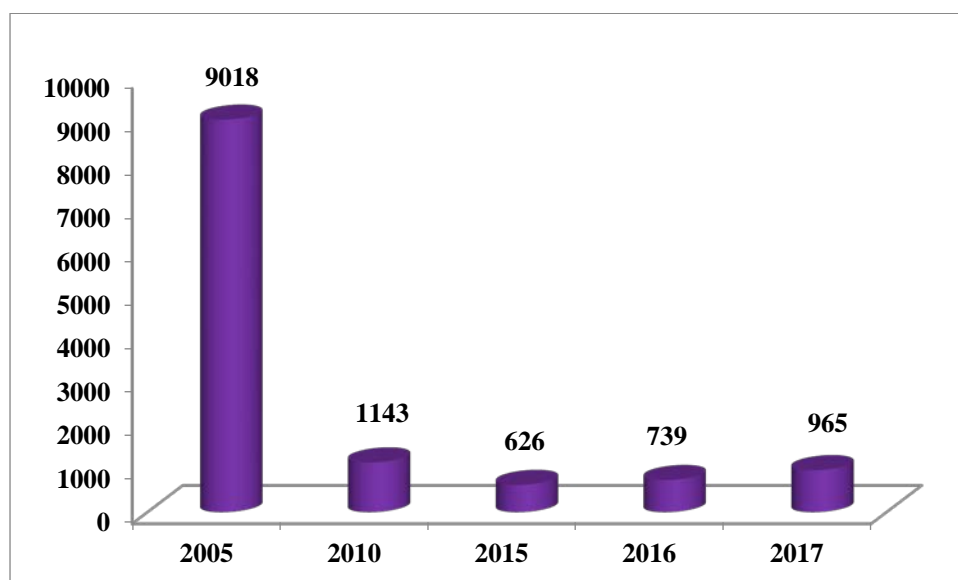
423,1 million Cypriniformes, 8,4 million Acipenseriformes (sturgeons), 5.5 million plant-fed fish and 0.2 million golden fishes are out of 437.2 million fish released into natural reservoirs by farms engaged in the conservation and protection of fish in 2017.

The regulation of fishing is of particular importance on protection of fish resources and provision of their efficient use.

136 legal entities and individuals hunted 964.9 tonnes fish (30.5% more than in 2016) against a quota of 1,024.9 tonnes in 2017, according to the rules for the use of fish and other water biological resources in the country. 559,1 ton Clupeonella, 100,1 ton Caspian kutum, 74,9 ton Clupea, 59,1 ton Liza, 49,8 ton Pseudophoxinus, 36,9 ton Cypriniformes, 30,9 ton common bream, 24,7 ton Carassius, 5,6 ton Alburnus, 23,8 ton other species were hunted.

41,1 thousand manat was paid by fishermen for the quota in 2017.

Hunted fish on quota, ton



Forest fires

Years	Number of fire	The area covered by the fire, ha	including forest covered are	An open area with no forest (shrubs)	Types of fire, ha		Volume of burned trees on the root, m3	Fire damage, thousand manats
					low fires	High fires		
2005	2	34,8	24,0	-	32,0	3,0	-	-
2010	24	55,4	23,7	31,6	55,4	-	18,9	1,1
2015	3	3,5	1,0	2,5	3,5	-	-	0,9
2016	2	0,7	-	0,7	0,7	-	-	0,1
2017	8	372,0	104,7	267,3	372,0	-	138,0	8,4

Biodiversity legislation and policy documents of Azerbaijan.

Bilateral cooperation in the field of Environment protection

- Agreement between the Government of the Republic of Azerbaijan and the Government of Georgia on cooperation in the field of environmental protection (18 February 1997);
- Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the Canadian Institute of Public Administration on the 2002-2005 Training Program on the Reduction of Gases Emission in the Caspian Basin (04 April 2003);
- Agreement on Cooperation with the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the OSCE Office in Baku (22 September 2003) (regardin the establishment of the Public Environmental Information Center in Azerbaijan);
- Memorandum of Understanding between the Government of the Republic of Azerbaijan and the Government of the Kingdom of Denmark on cooperation in the implementation of the Kyoto Protocol of the UN Framework Convention on Climate Change (08 December 2004);
- Agreement between the Government of the Republic of Azerbaijan and the Government of the Republic of Turkey on cooperation in the field of environmental protection (09 July 2004);
- Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the Department of Environment of the Islamic Republic of Iran (05 August 2004);
- Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the World Wildlife Fund on cooperation in the field of nature protection in the Republic of Azerbaijan (13 October 2004);
- Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the German Financial Cooperation Organization (KFW) on implementation of "Ecoregion Conservation Program for the Caucasus" (25 October 2004).
- Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the World Wildlife Fund on nature conservation (13 November 2004);

- Agreement between the Republic of Moldova and the Republic of Azerbaijan on cooperation in the field of environmental protection (22 February 2007);
- Protocol on Technical Cooperation between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and Egyptian Mineral Resources Agency (07 May 2007);
- Agreement between the Republic of Ukraine and the Republic of Azerbaijan on cooperation in the field of environmental protection (05 September 2007);
- Agreement between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the State Committee for Nature Protection of the Republic of Uzbekistan on cooperation in the field of environmental protection (11 September 2008);
- Memorandum of Understanding between the Republic of Azerbaijan and the United Nations Development Program on the Carbon Fund of Millennium Development Goals (07 April 2009);
- Agreement between the Government of the Republic of Azerbaijan and the Government of the Republic of Latvia on cooperation in the field of environmental protection (25 June 2009);
- Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the Technical Cooperation Organization of the Federal Republic of Germany (GIZ) in the field of sustainable natural resources management (17 July 2009);
- Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the Korean Institute of Environmental Industry and Technology on the preparation of the General Environmental Management Plan in Azerbaijan (16 September 2009);
- Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and the Ministry of Environment of Romania on cooperation in the field of environmental protection (28 September 2009).

Orders of the President of the Republic of Azerbaijan

- Order of the President of the Republic of Azerbaijan on the “Establishment of the Zoological Park” (December 26, 2008 No 109);
- Order of the President of the Republic of Azerbaijan on the “Measures on construction of a new Zoological Park in the Absheron District” (5 August 2011, No- 1673).
- Order of the President of the Republic of Azerbaijan on the “Additional measures in the field of greening of Baku” (3 April 2009, No – 218);
- Order of the President of the Republic of Azerbaijan on the “Measures for complex hydrometeorological and ecological research of the Bazarduzu-

- Shahdag-Tufandagh ecosystem of the Greater Caucasus” (27 December 2008, N-110);
- Order of the President of the Republic of Azerbaijan on the “Measures to improve the management of greenery in the Republic of Azerbaijan” (13 June 2008, No-2868);
 - Order of the President of the Republic of Azerbaijan on the “Measures to protect the Caspian Sea from pollution” (20 June 2007, No-2244);
 - Order of the President of the Republic of Azerbaijan on the “Additional measures to protect the Caspian Sea from pollution” (13 June 2008, No-2867);
 - Order of the President of the Republic of Azerbaijan on the “Establishment of Goygol National Park of the Republic of Azerbaijan” (1 April 2008, No-2744);
 - Order of the President of the Republic of Azerbaijan on the “Establishment of Korchay State Nature Reserve of the Republic of Azerbaijan” (1 April 2008, No-2745);
 - Order of the President of the Republic of Azerbaijan on the “Establishment of Hirkan National Park of the Republic of Azerbaijan” (9 February 2004, No-81);
 - Order of the President of the Republic of Azerbaijan on the “Appointment of its administrative body in the Republic of Azerbaijan for contacts with the Secretariat and members of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)” (8 July 1999, No-188);
 - Order of the President of the Republic of Azerbaijan on the “Approval of the State Program on the effective use of summer and winter pastures, weeds and prevention of desertification in the Republic of Azerbaijan” (22 May 2004, No-222);
 - Order of the President of the Republic of Azerbaijan on the “Establishment of Altiaghaj National Park of the Republic of Azerbaijan” (31 August 2004, No-365);
 - Order of the President of the Republic of Azerbaijan on the “Establishment of Eldar Shami State Nature Reserve of the Republic of Azerbaijan” (16 December 2004, No-550);
 - Order of the President of the Republic of Azerbaijan on the “Establishment of Absheron National Park of the Republic of Azerbaijan” (8 February 2005, No-622);
 - Order of the President of the Republic of Azerbaijan on the “Approval of the State Program on the Use of Alternative and Renewable Energy Sources in the Republic of Azerbaijan” (24 October 2004, No-462);
 - Order of the President of the Republic of Azerbaijan on the “Appointment of the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan as a competent authority to the Convention on Transboundary Impact of Industrial Accidents” (1 April 2005, No-729);

- Order of the President of the Republic of Azerbaijan on the “Approval of the National Environmental Programs in the Republic of Azerbaijan” (18 February 2003, No-1152);
- Order of the President of the Republic of Azerbaijan on the “Establishment of Shahbuz State Nature Reserve and Ordubad National Park of the Republic of Azerbaijan” (16 June 2003, No-1249);
- Order of the President of the Republic of Azerbaijan on the “Approval of the National Strategy and Action Plan for the conservation and sustainable use of biodiversity in the Republic of Azerbaijan” (24 March 2006, No-1368);
- Order of the President of the Republic of Azerbaijan on the “Approval of the Complex Action Plan on improvement of the ecological situation in the Republic of Azerbaijan for 2006-2010” (28 September 2006, No-1697);
- Order of the President of the Republic of Azerbaijan on the “Establishment of Shahdagh National Park of the Republic of Azerbaijan” (8 December 2006, No-1814);
- Order of the President of the Republic of Azerbaijan on the “Establishment of Samur-Yalama National Park of the Republic of Azerbaijan” (5 November 2012, No-2518).

Laws of the Republic of Azerbaijan

- Law on “Ecological Safety” of the Republic of Azerbaijan (8 June 1999, No-677-IQ);
- Law on “Environmental protection” of the Republic of Azerbaijan (8 June 1999, No-678-IQ);
- Law on “Protection of Atmosphere” of the Republic of Azerbaijan (27 March 2001, No-109-IIQ);
- Law on “Fishery” of the Republic of Azerbaijan (27 March 1998, No-457-IQ);
- Law on “Radiation safety of the population” of the Republic of Azerbaijan (30 December 1997, No-423-IQ);
- Criminal Code of law of the Republic of Azerbaijan: Environmental Crimes;
- Law on “Fauna” of the Republic of Azerbaijan (4 June 1999, No-675-IQ);
- Law on “Specially protected nature areas” of the Republic of Azerbaijan (24 March 2000, No-840-IQ);
- “Land Code of law of the Republic of Azerbaijan”;
- Law on “Phytosanitary control” of the Republic of Azerbaijan (12 May 2006, No-102-IIIQ);
- Law on “Selection Achievements” of the Republic of Azerbaijan (15 November 1996, No-197-IQ);
- Law on “Seed production” of the Republic of Azerbaijan (11 March 1997, No-257-IQ);

- Law on “Obtain environmental information” of the Republic of Azerbaijan (12 March 2002, No-270-IIQ);
- Law on “Sanitary and epidemiological well-being” of the Republic of Azerbaijan (10 November 1992, No-371);
- Law on “Environmental education and awareness of the population” of the Republic of Azerbaijan (10 December 2002, No-401-IIQ);

Note: The amendments and additions made by the relevant laws of the Republic of Azerbaijan so far have been reflected in the above-mentioned laws.

Decrees of the President of the Republic of Azerbaijan

- Decree of the President of the Republic of Azerbaijan on the Approval of the “General Regulations of State Nature and Biosphere Reserves of the Republic of Azerbaijan” and the “General Regulations of National Parks of the Republic of Azerbaijan” (4 July 2001, No – 531);
- Decree of the President of the Republic of Azerbaijan on the “Measures on preservation and development of natural resources of Glycyrrhiza in the Republic of Azerbaijan” (8 January 1992, No-544);
- Decree of the President of the Republic of Azerbaijan on the Approval of the “Regulation of the Hirkan National Park of the Republic of Azerbaijan” (24 April 2004, No-57);
- Decree of the President of the Republic of Azerbaijan on the Approval of the “Regulations of the established National Parks of the Republic of Azerbaijan” (3 August 2004, No-106) (Regulations of the Zangazur National Park of the Republic of Azerbaijan named to academic Hasan Aliyev, Shirvan National Park and Aghgol National Park of the Republic of Azerbaijan);
- Decree of the President of the Republic of Azerbaijan on the Approval of the “Regulation of the Altiagaj National Park of the Republic of Azerbaijan” (23 November 2004, No-147);
- Decree of the President of the Republic of Azerbaijan on the Approval of the “Regulation of the Absheron National Park of the Republic of Azerbaijan” (27 April 2005, No-227);
- Decree of the President of the Republic of Azerbaijan on the Approval of the “Regulation of the Samur-Yalama National Park of the Republic of Azerbaijan” (25 June 2013, No-929);
- Decree of the President of the Republic of Azerbaijan on the “further liberalization of foreign trade in the Republic of Azerbaijan” (24 June 1997, No-609);

- Decree of the President of the Republic of Azerbaijan on the “Improvement of licensing procedures for certain types of activities” (2 September 2002, No-782);

Note: The amendments and additions made by the relevant decrees of the Republic of Azerbaijan so far have been reflected in the above-mentioned decrees.

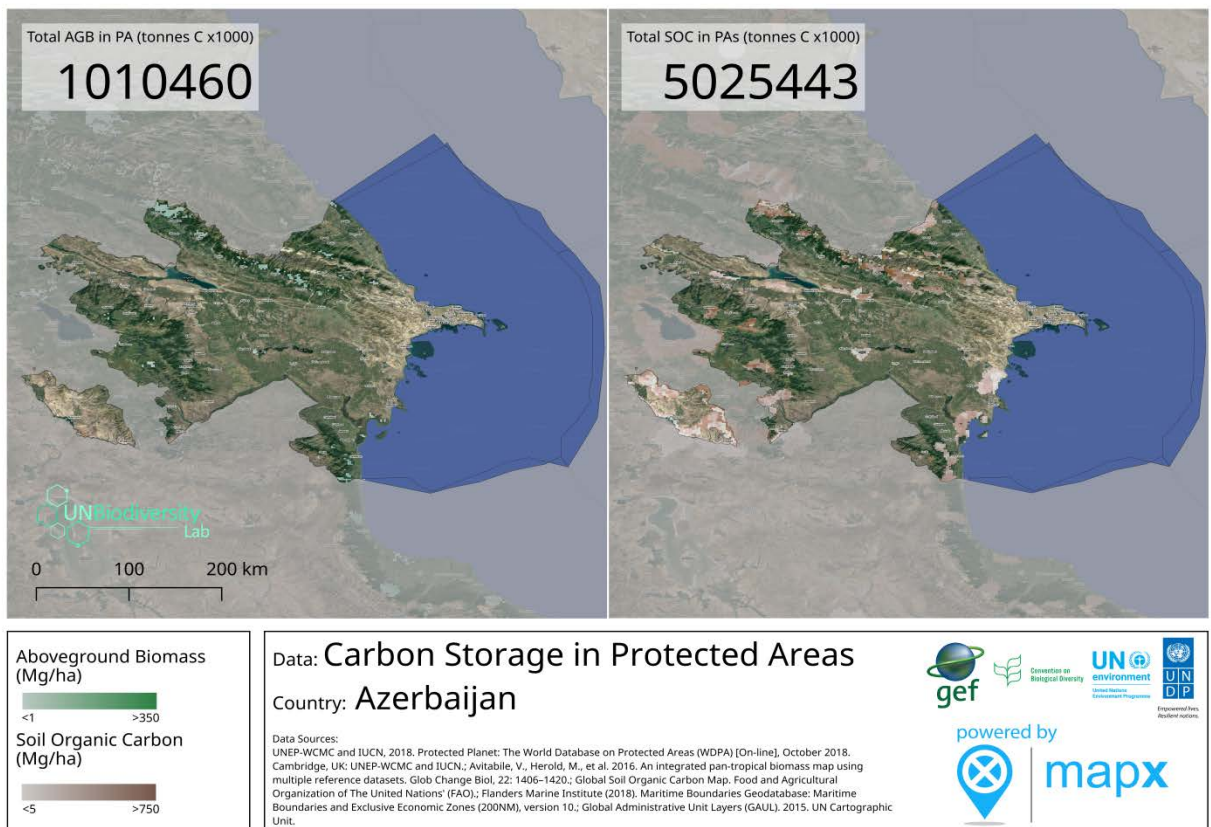
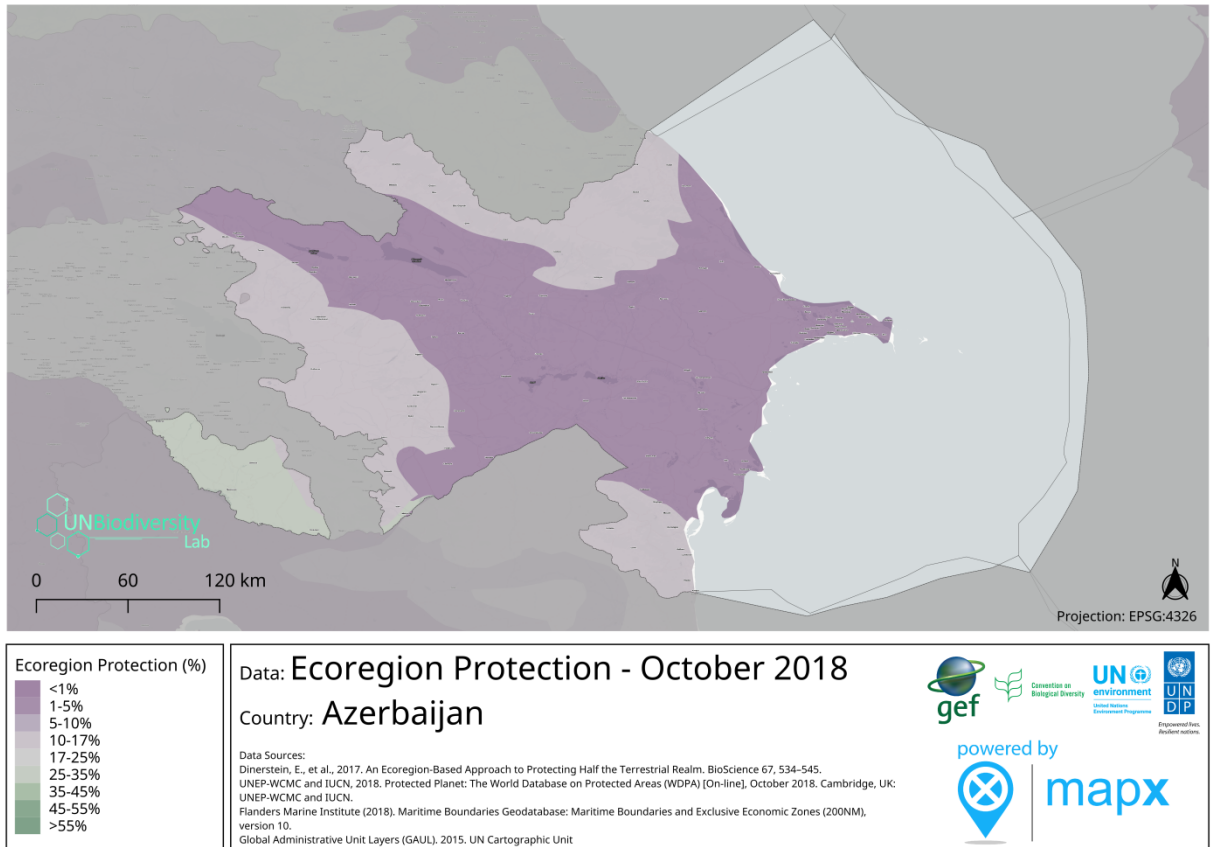
Decisions of the Cabinet of Ministers of the Republic of Azerbaijan

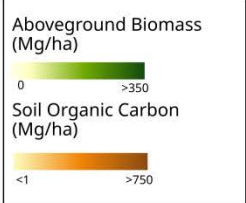
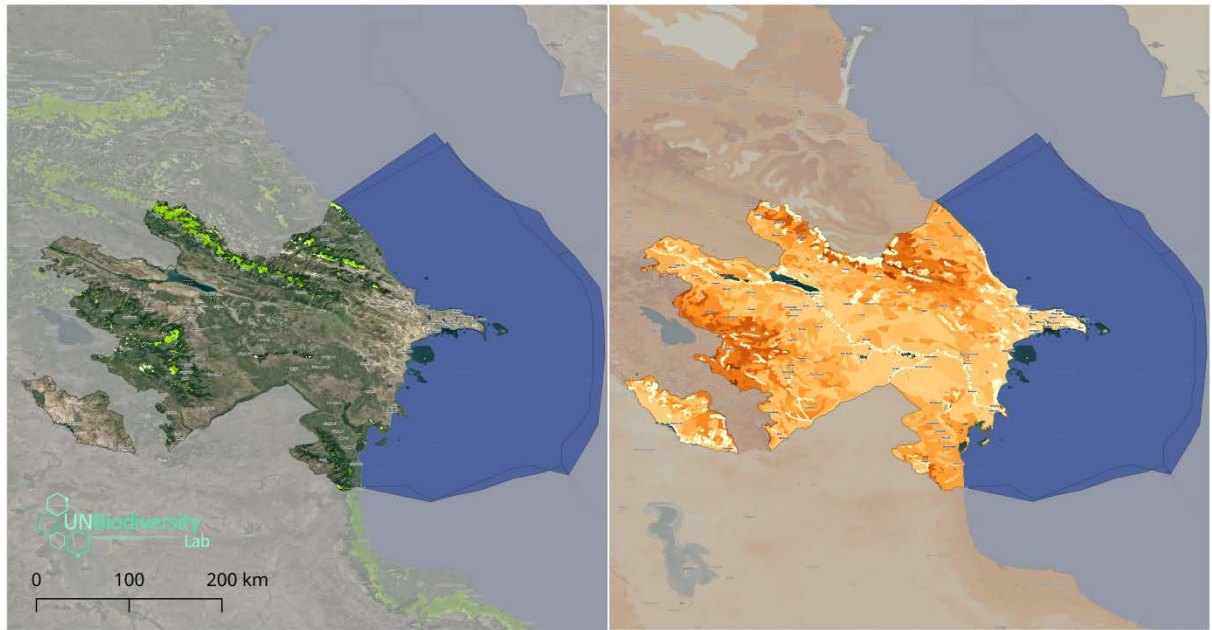
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the some normative legal acts concerning the specially protected natural territories in the Republic of Azerbaijan” (4 January 2001, No-2);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Phytosanitary rules of forest fund protection against pests and diseases” (9 February 1999, No-16);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Application of payments for natural resources and discharge of pollutants into the natural environment, and use of funds received from those payments” (3 March 1992, No-122);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Classification of the type of limited environmental information” and “Classification of public authorities to which the appeal or request on limited environmental information is sent” (25 February 2003, No-26);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Rules for the provision of information in the field of environmental protection and maintaining state statistics” (22 February 2001, No- 40);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Regulation of the Eldar Shami State Nature Reserve of the Republic of Azerbaijan” (17 March 2005, No-43);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Regulation on the State Fund for the Protection of the Environment”, “Rules for Conducting Environmental Audit Activities” and “Financing of state ecological expertise” (22 February 2001, No-41);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on Approval of the “Procedure for concluding a contract with a person seeking information on the environment”, “Analysis, storage, updating environmental information, registers, regulations and list of entities” (13 May 2003, No-60);

- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “State compensation for the expenditures on destroyed seeds and sowing as a result of preventive measures to prevent the spread of quarantine entities” (10 July 1997, No-75);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Some normative legal acts related to the Land Code of the Republic of Azerbaijan” (15 March 2000, No-42);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Some normative legal acts related to the Land Code of the Republic of Azerbaijan” (1 May 2000, No-79);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Distribution of Hirkan, Shirvan, Aghgol, Altiaghaj, Absheron National Parks’ territories by zones of activity with special protection regimes” (15 March 2006, No-81);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Establishment of Gax State Nature Reserve” (16 June 2003, No-84);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Rules for determining sources of financing and amount of payment for environmental information” (7 July 2003, No-88);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the Regulation on “Rules of state monitoring of environment and natural resources” (1 July 2004, No-90);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Rules of determination and use of flood zones, sizes and boundaries of their protection strips” (27 July 2004, No-99);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of new payment rates for environmental damage caused by illegal mining of mineral deposits in the Republic of Azerbaijan” (28 December 1998, No-239);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Establishment of the Intersectoral Commission on environmental education and awareness and approval of the Regulations of the Commission” (22 September 2003, No-120);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the Regulation of the Garayazi State Nature Reserve” (3 August 2005, No-148);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the Rules for the organization of natural monuments and their territories” (12 July 2006, No-169);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Rules of use, protection and conservation of trees and shrubs not included in the forest fund of the Azerbaijan Republic” (19 September 2005, No-173);

- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Organization of Girmeki and Gax nature monuments” (5 August 2006, No-190);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Rules of use and circulation of sturgeon resources” (9 November 2005, No-206);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Establishment of the Hirkan State Nature Sanctuary” (21 December 2005, No-234);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Rules for hunting in the territory of the Republic of Azerbaijan” and “Approval of the Regulation on Hunting Farms” (27 January 2005, No-10);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of some regulations on fishery in the Republic of Azerbaijan” (6 September 1999, No-146);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the Rules on “Protection of fishery resources and fishery hunting in the Republic of Azerbaijan” (24 September 1999, No-152);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Fauna entities, their obtainment, state registration, maintenance of the state cadastre and state monitoring of Fauna entities” (3 May 2001, No-89);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Rules of implementation of the state control in the field of protection and use of fauna”, “Types, rates, rules of payment for the use of fauna and penalties for illegal hunting” and “Instruction on use of payments for using fauna entities and use of penalties for illegal hunting” (6 November 2004, No-176);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Rules for the protection and use of animals included in the list of specially protected animal species” and “Rules of import and export of fauna entities in the Republic of Azerbaijan” (27 July 2004, No-100);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Regulation of the “Red Book” of the Republic of Azerbaijan” (15 July 2000, No-125);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the some legal acts on hunting in the Republic of Azerbaijan” (30 September 2004, No-147);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “List of wild animals allowed to individuals and legal entities for keeping and breeding in free or semi-free conditions and requirements for their storage, protection and use” (1 May 2001, No-86);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Rules on implementation of state control over condition,

- use, protection, conservation of forest fund and reproduction of forests” (3 February 2000, No-15);
- Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Rules of use of forest fund areas for scientific research, cultural and health, tourism and sports purposes, hunting needs” (30 October 1998, No-219);
 - Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Some issues related to forestry” (4 October 1999, No-161);
 - Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Rules of forestry protection and use of reproduction fund” (21 May 1999, No-83);
 - Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Some normative legal acts concerning forestry” (15 March 2000, No-45);
 - Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Some normative legal acts concerning forest farm” (26 April 1999, No-70);
 - Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Some normative legal acts concerning forest farm” (8 November 1999, No-174);
 - Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Approval of the “Some normative legal acts concerning forest farm” (9 July 1999, No-116);
 - Decision of the Cabinet of Ministers of the Republic of Azerbaijan on “Normative legal acts concerning forest farm” (7 December 1998, No-230).

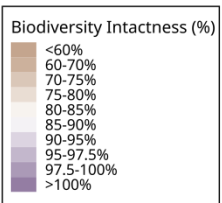
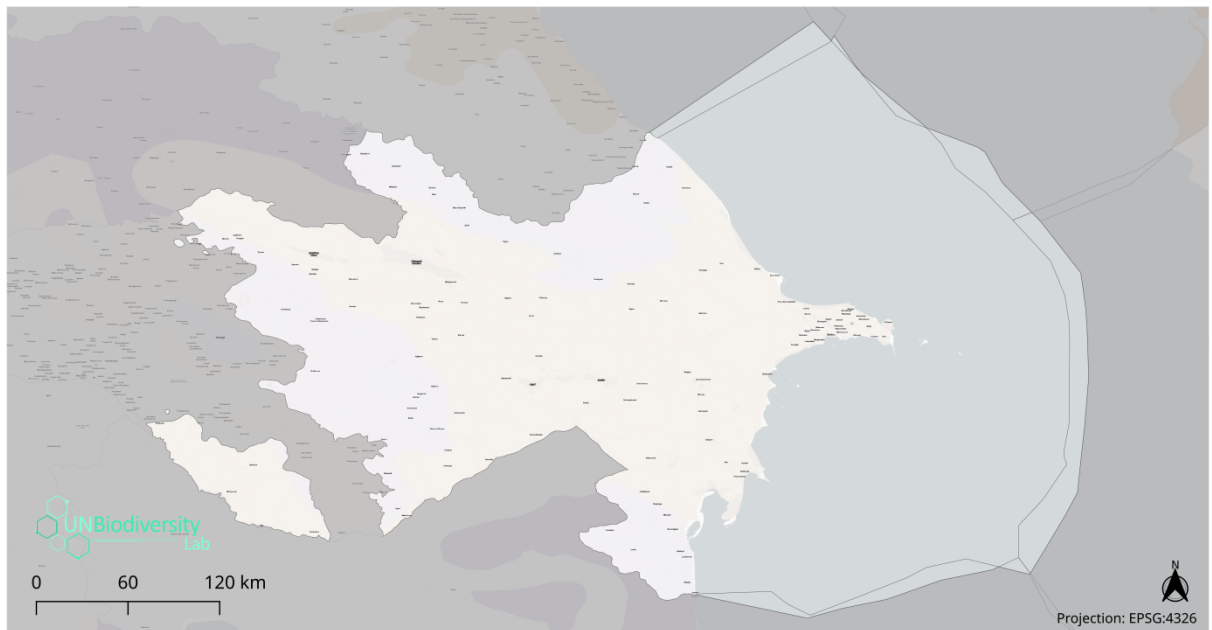




Data: Carbon Storage in the Environment
Country: Azerbaijan

Data Sources:
 Avitabile, V., Herold, M., et al. 2016. An integrated pan-tropical biomass map using multiple reference datasets. *Glob Change Biol*, 22: 1406-1420.
 Global Soil Organic Carbon Map. Food and Agricultural Organization of The United Nations' (FAO).
 Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
 Global Administrative Unit Layers (GAUL). 2015. UN Cartographic Unit.

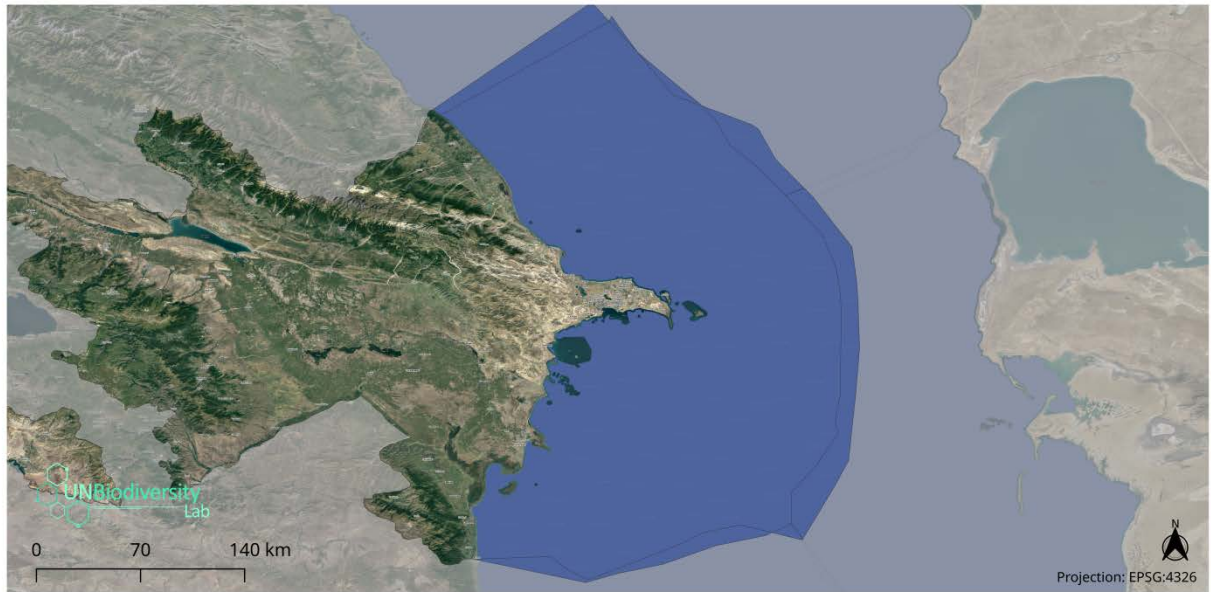
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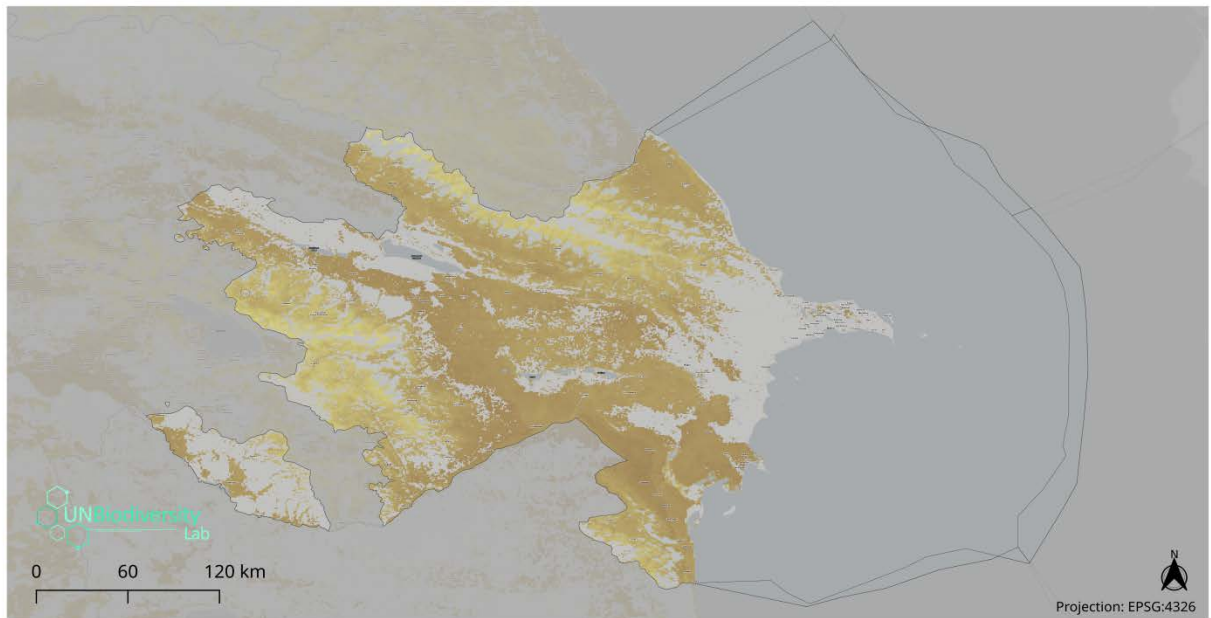
Data: Degradation within Ecoregions (2016)
Country: Azerbaijan

Data Sources:
 Dinerstein, E., et al., 2017. An Ecoregion-Based Approach to Protecting Half the Terrestrial Realm. *BioScience* 67, 534-545.
 Newbold, T., et al., 2016. Has land use pushed terrestrial biodiversity beyond the planetary boundary? A global assessment. *Science* 353, 288-291.
 Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
 Global Administrative Unit Layers (GAUL). 2015. UN Cartographic Unit

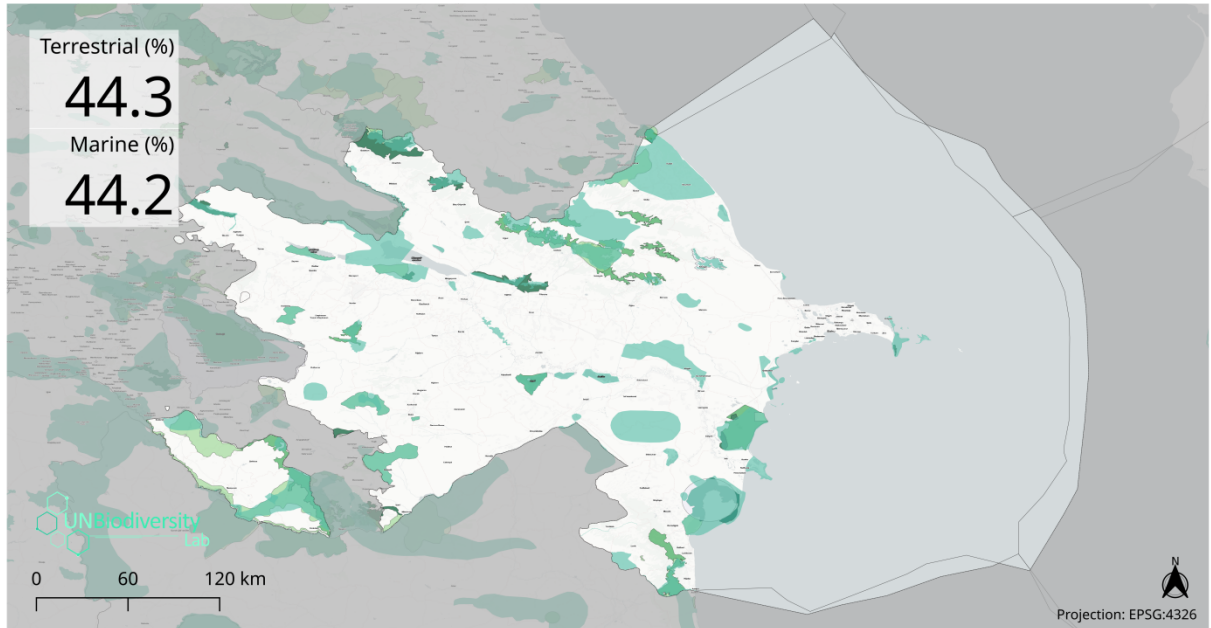
powered by **mapx**



<p>Coral Reefs</p> <p>Tsunami Exposure (people/year)</p> <p>Mangrove Forest Cover</p> <p>Lower (light green) to Higher (dark green)</p>	<p>Data: Tsunami Risk to Populations and Natural Coastline Protection</p> <p>Country: Azerbaijan</p> <p><small>Data Sources:</small> Hamilton, S. E., & Casey, D. (2016). Creation of a high spatio-temporal resolution global database of continuous mangrove forest cover for the 21st century (CGMFC-21). <i>Global Ecology and Biogeography</i>, 25(6), 729-738; UNEP-WCMC, WorldFish Centre, WRI, TNC (2010). Global distribution of coral reefs, compiled from multiple sources including the Millennium Coral Reef Mapping Project. Version 2.0, updated by UNEP-WCMC. Includes contributions from IMArSUSF and IRD (2005), IMArS-USF (2005) and Spalding et al. (2001); Physical exposition to tsunamis. 2011. <i>International Centre for Geohazards (NGI)</i>; Flanders Marine Institute (2018). <i>Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM)</i>, version 10.; <i>Global Administrative Unit Layers (GAUL)</i>, 2015. UN Cartographic Unit.</p>	<p>powered by mapx</p>
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<p>SOC Increase After 20 Yr (Croplands)</p> <p>low (light yellow) to high (dark brown)</p> <p>Sequestration Potential in Catchment (mean C eqv./km2)</p> <p>0 - 65 (lightest green) to 2095 - 3233 (darkest green)</p>	<p>Data: Carbon Sequestration Potential</p> <p>Country: Azerbaijan</p> <p><small>Data Sources:</small> Potential for Tropical Forest Carbon Sequestration. <i>NatureServe Dashboard</i>. www.natureserve.org.; Zomer, R.J., Bossio, D.A., Sommer, R., Verchot, L.V., 2017. Global Sequestration Potential of Increased Organic Carbon in Cropland Soils. <i>Scientific Reports</i> 7, 15554; Flanders Marine Institute (2018). <i>Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM)</i>, version 10.; <i>Global Administrative Unit Layers (GAUL)</i>, 2015. UN Cartographic Unit.</p>	<p>powered by mapx</p>
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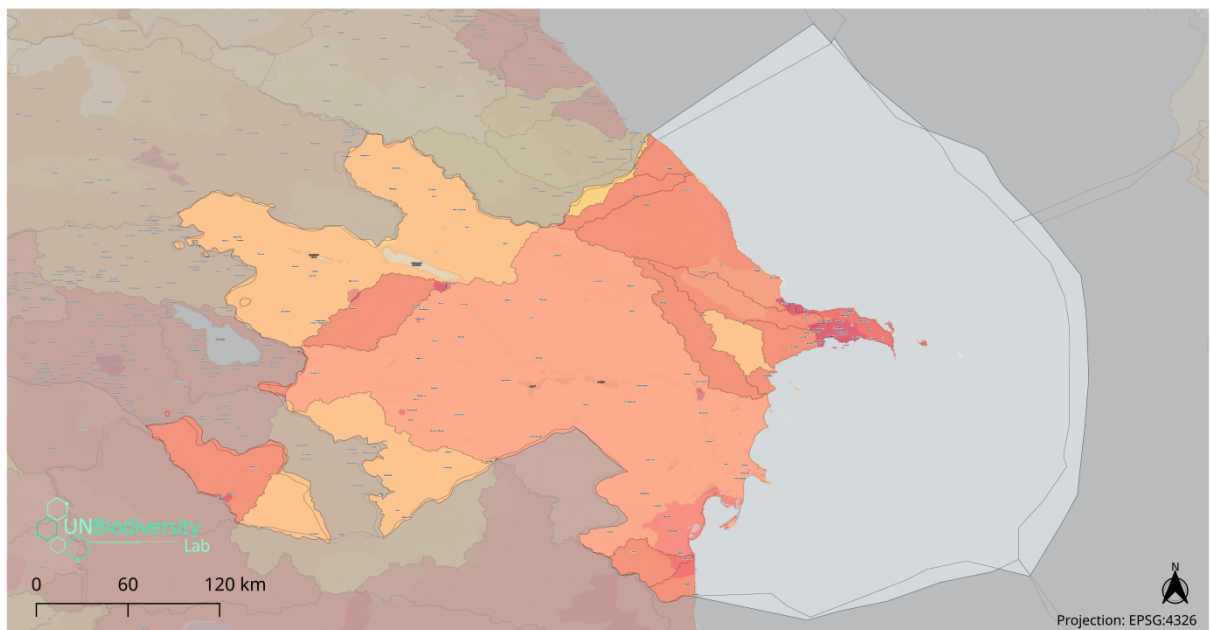


Key Biodiversity Areas	
WDPA IUCN Category	
Land	Marine
Ia	Ia
Ib	Ib
II	II
III	III
IV	IV
Not Applicable	Not Applicable
Not Assigned	Not Assigned
Not Reported	Not Reported

Data: Key Biodiversity Area Protection

Country: Azerbaijan

Data Sources:
 World Database of Key Biodiversity Areas. Developed by the KBA Partnership (BirdLife International, International Union for the Conservation of Nature, Amphibian Survival Alliance, Conservation International, Critical Ecosystem Partnership Fund, Global Environment Facility, Global Wildlife Conservation, NatureServe, Rainforest Trust, Royal Society for the Conservation of Birds, Wildlife Conservation Society and World Wildlife Fund); UNEP-WCMC, IUCN, and NGS, 2018. Protected Planet: The World Database on Protected Areas (WDPA) [On-line], October 2018. Cambridge, UK: UNEP-WCMC and IUCN; Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10; Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit

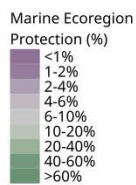


Withdrawal (% Annual Flow)	Population Density (2015)
Low (<10%)	No Data
Low to medium (10-20%)	1-5
Medium to high (20-40%)	2-25
High (40-80%)	25-250
Extremely high (>80%)	250-1000
Arid & low water use	1000+
No data	

Data: Key Usage Areas for Water Security

Country: Azerbaijan

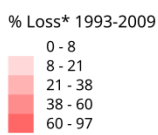
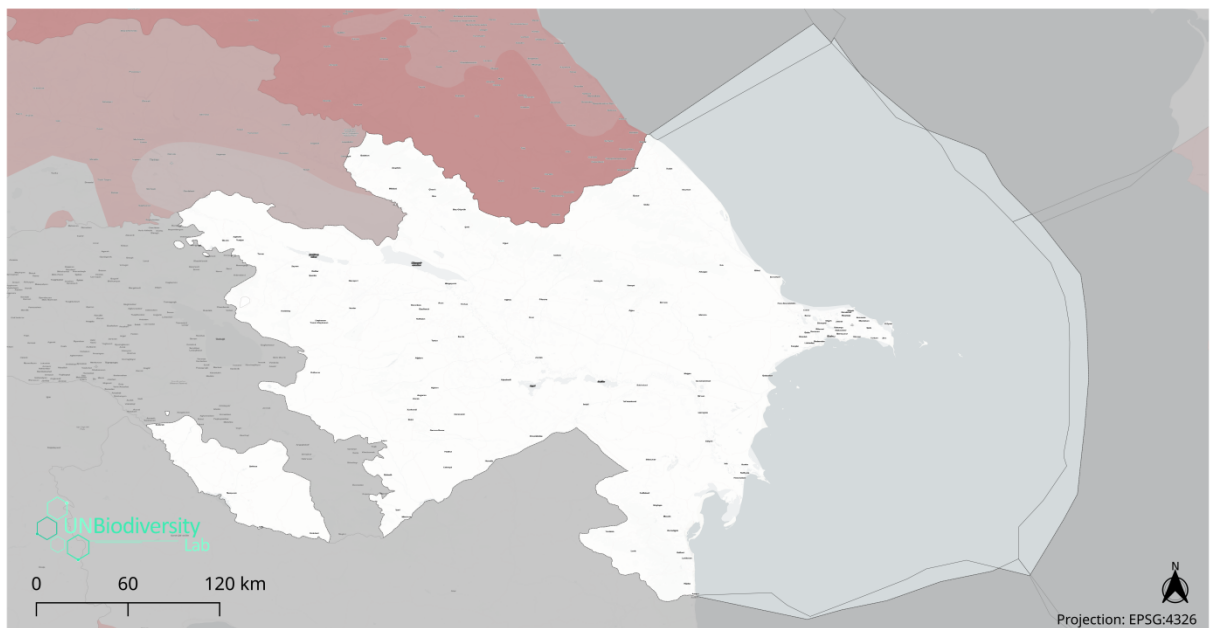
Data Sources:
 Gassert, F., M. Landis, M. Luck, P. Reig, and T. Shiao. 2014. "Aqueduct Global Maps 2.1." Working Paper. Washington, DC: World Resources Institute; Center for International Earth Science Information Network (CIESIN), Columbia University. 2016. Gridded Population of the World (GPW), v4: UN-Adjusted Population Density, v4 (2000, 2005, 2010, 2015, 2020). Palisades, NY: SEDAC; Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10; Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit.



Data: Marine Ecoregion Protection - Oct 2018

Country: Azerbaijan

Data Sources:
 Spalding, M.D., et al., 2007. Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas. *BioScience* 57, 573-583
 UNEP-WCMC, IUCN, and NGS, 2018. Protected Planet: The World Database on Protected Areas (WDPA) [On-line], October 2018. Cambridge, UK: UNEP-WCMC and IUCN.
 Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
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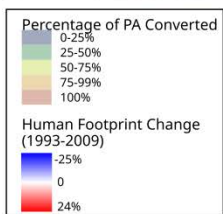
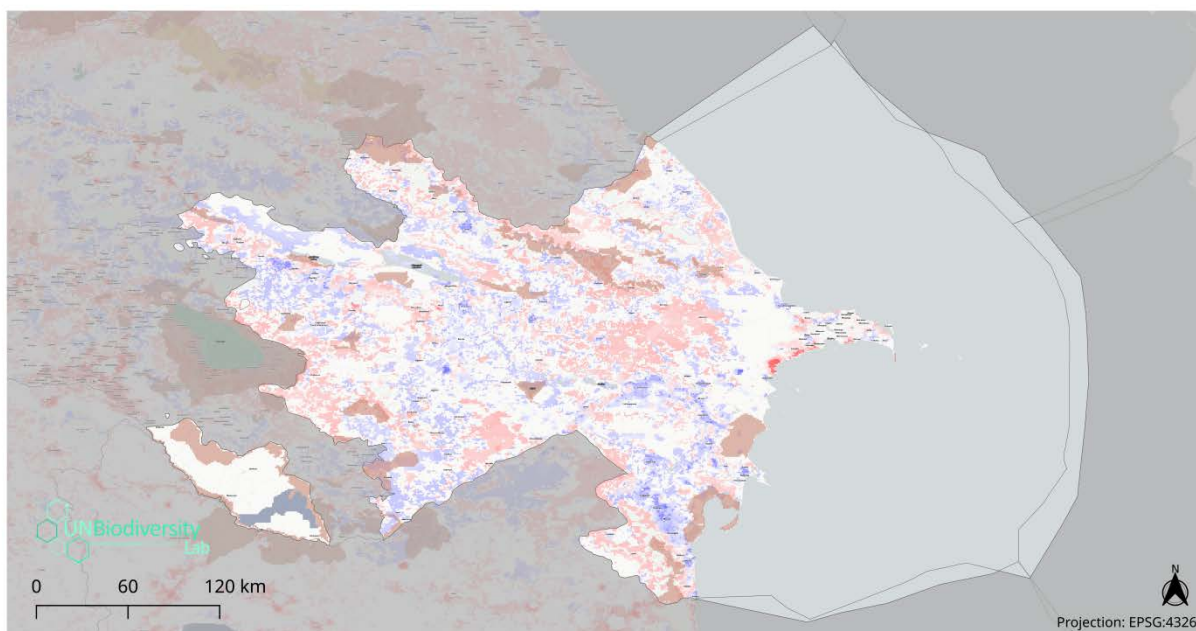
* Loss refers to natural areas (HFP<4) in 1993.

Data: Loss within Ecoregions 1993-2009

Country: Azerbaijan

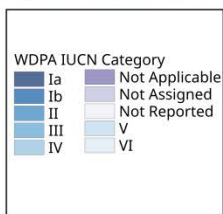
Data Sources:
 Dinerstein, E., et al., 2017. An Ecoregion-Based Approach to Protecting Half the Terrestrial Realm. *BioScience* 67, 534-545.
 Venter, O., et al., 2016. Sixteen years of change in the global terrestrial human footprint and implications for biodiversity conservation. *Nature Communications* 7, 12558.
 Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
 Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit





Data: PA Management Effectiveness
Country: Azerbaijan

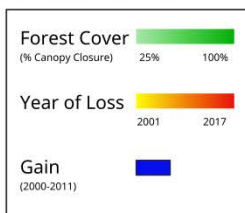
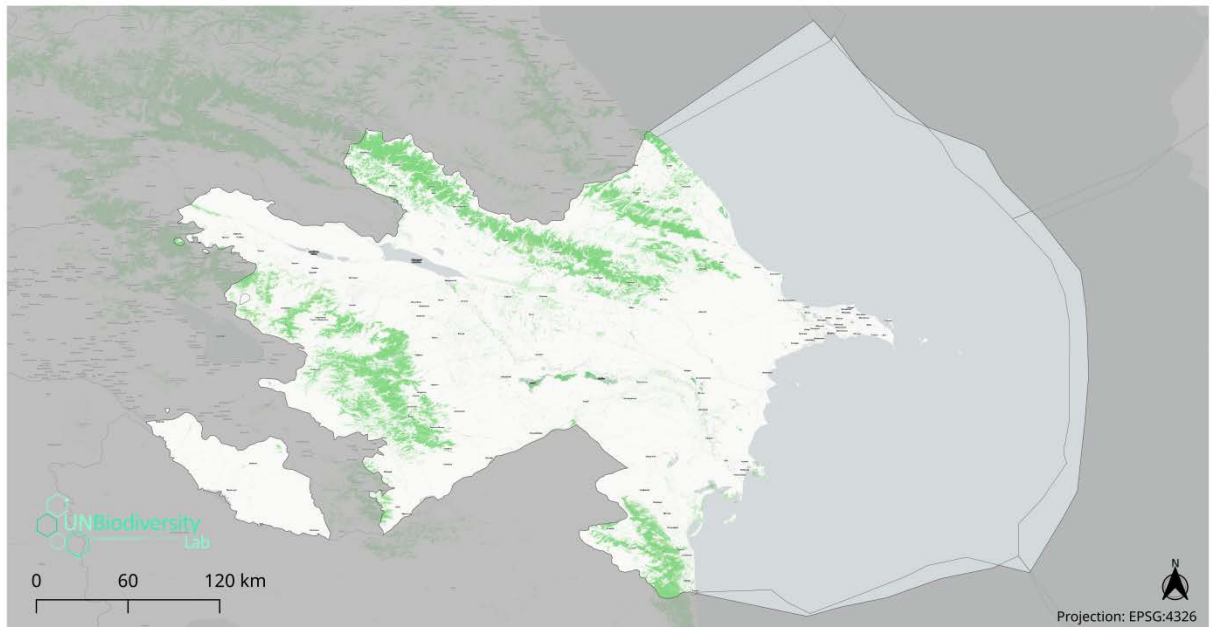
Data Sources:
 Jones, K.R., Venter, O., Fuller, R.A., Allan, J.R., Maxwell, S.L., Negret, P.J., Watson, J.E.M., 2018. One-third of global protected land is under intense human pressure. *Science* 360, 788-791.
 Venter, O., et al., 2016. Sixteen years of change in the global terrestrial human footprint and implications for biodiversity conservation. *Nature Communications* 7, 12558.
 Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
 Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit



Data: Marine Protected Area Coverage
Country: Azerbaijan

Data Sources:
 UNEP-WCMC, IUCN, and NGS, 2018. Protected Planet: The World Database on Protected Areas (WDPA) [On-line], October 2018. Cambridge, UK: UNEP-WCMC and IUCN.
 Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
 Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit

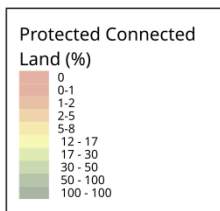
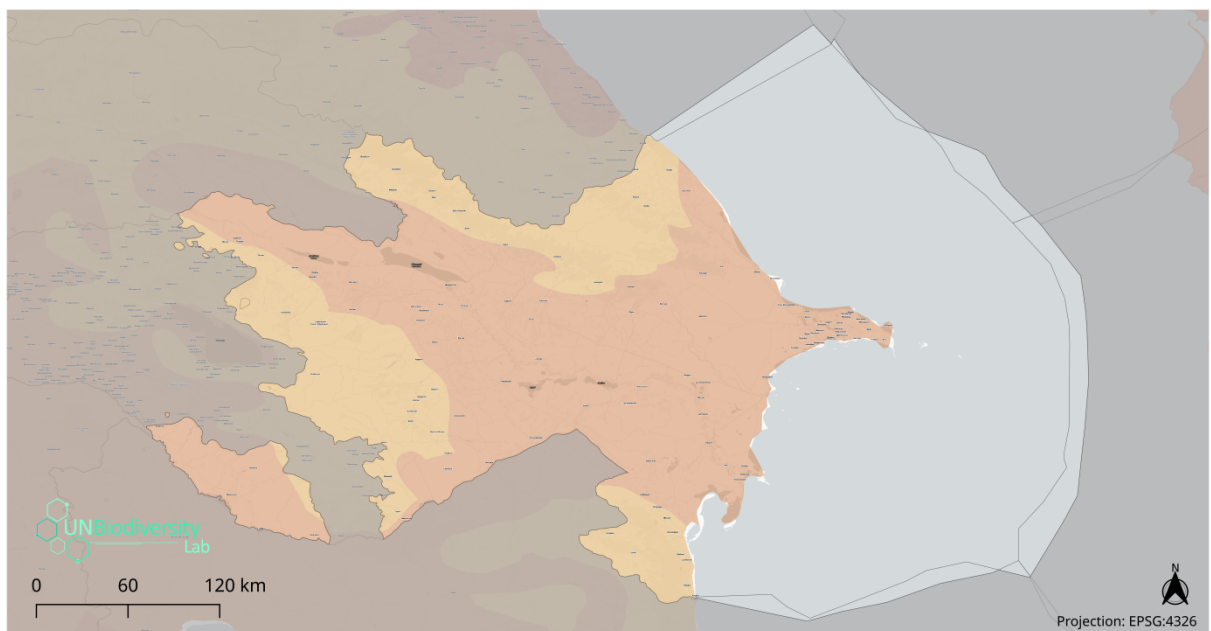




Data: Forest Cover Loss (2000-2017)

Country: Azerbaijan

Data Sources:
 Hansen, M.C., et al., 2013. High-Resolution Global Maps of 21st-Century Forest Cover Change. Science 342, 850-853.
 Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit.

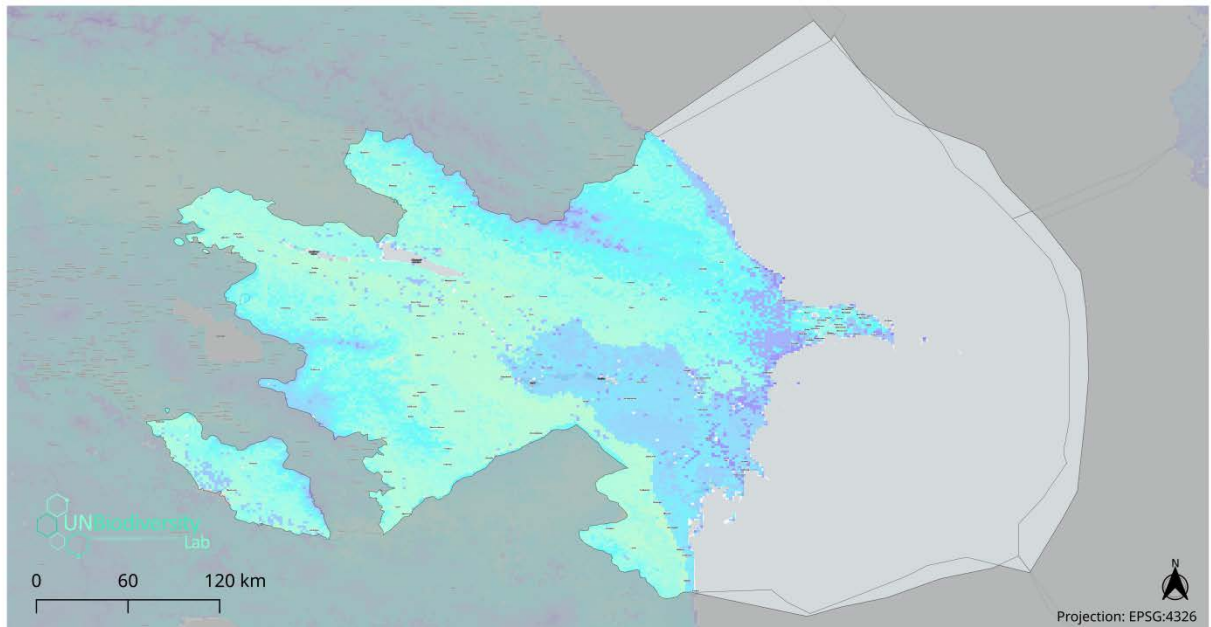





Data: Protected and Connected Index

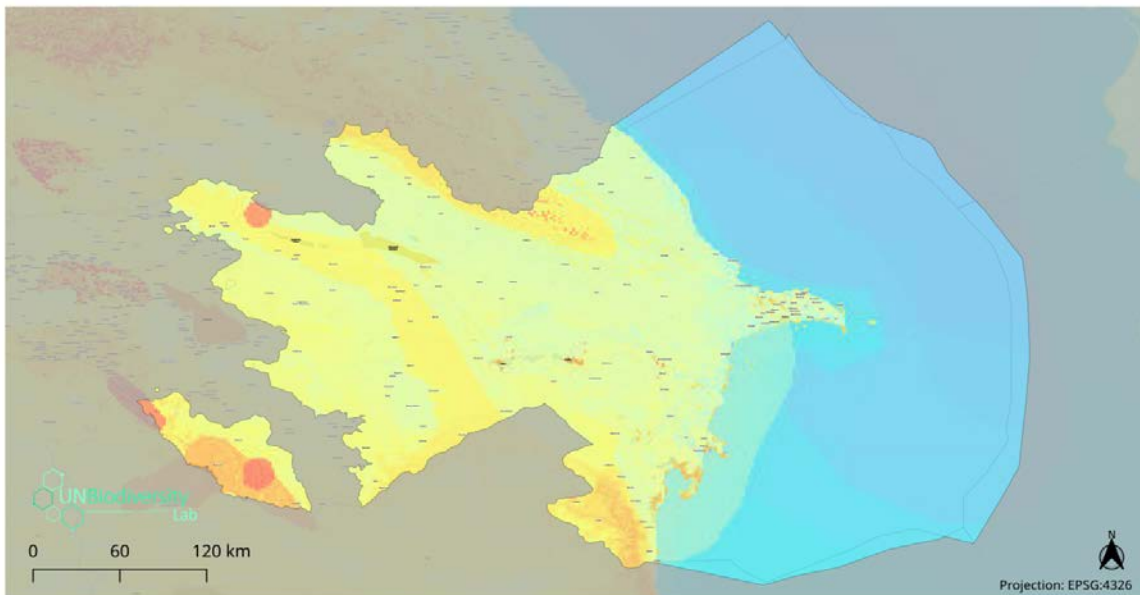
Country: Azerbaijan

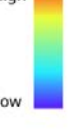


Data Sources:
 Saura, S., Bastin, L., Battistella, L., Mandrici, A., Dubois, G., 2017. Protected areas in the world's ecoregions: How well connected are they? Ecological Indicators 76, 144-158.
 Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
 Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit

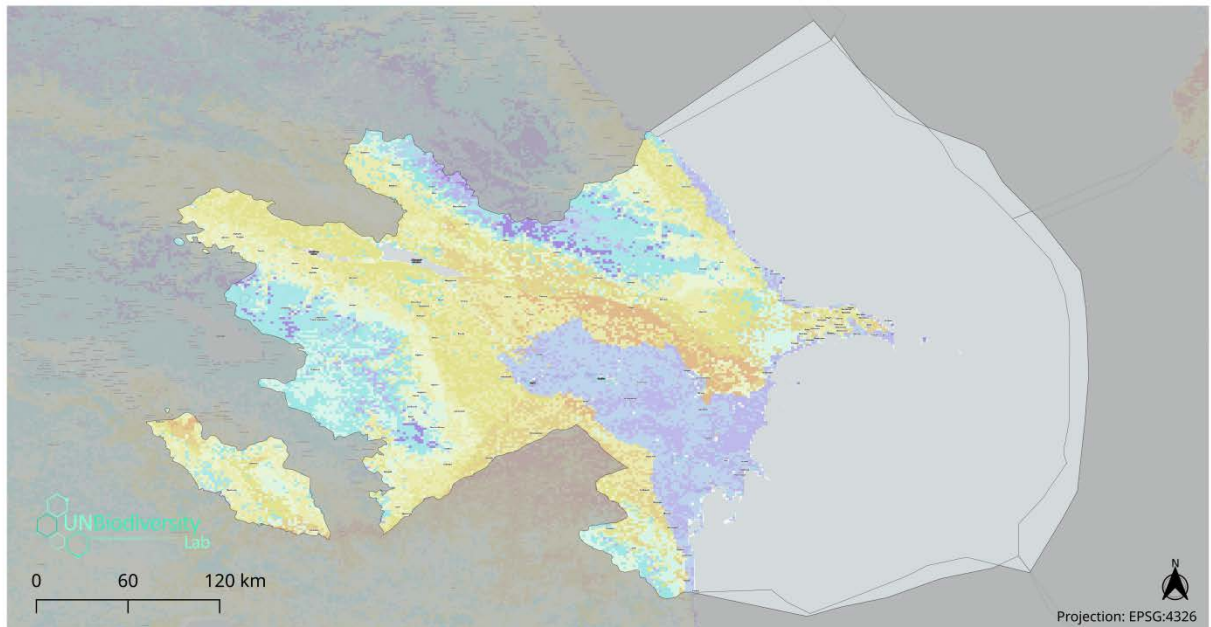




<p>Species Richness</p> <p>High</p>  <p>Low</p>	<p>Data: Species Richness (IUCN)</p> <p>Country: Azerbaijan</p> <p>Data Sources: The IUCN Red List of Threatened Species, Version 3. http://www.iucnredlist.org. Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10. Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit</p>	 <p>powered by</p> 
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<p>Range Rarity</p> <p>High</p>  <p>Low</p>	<p>Data: Species Range Rarity (IUCN)</p> <p>Country: Azerbaijan</p> <p>Data Sources: The IUCN Red List of Threatened Species, Version 3. http://www.iucnredlist.org. Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10. Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit</p>	 <p>powered by</p> 
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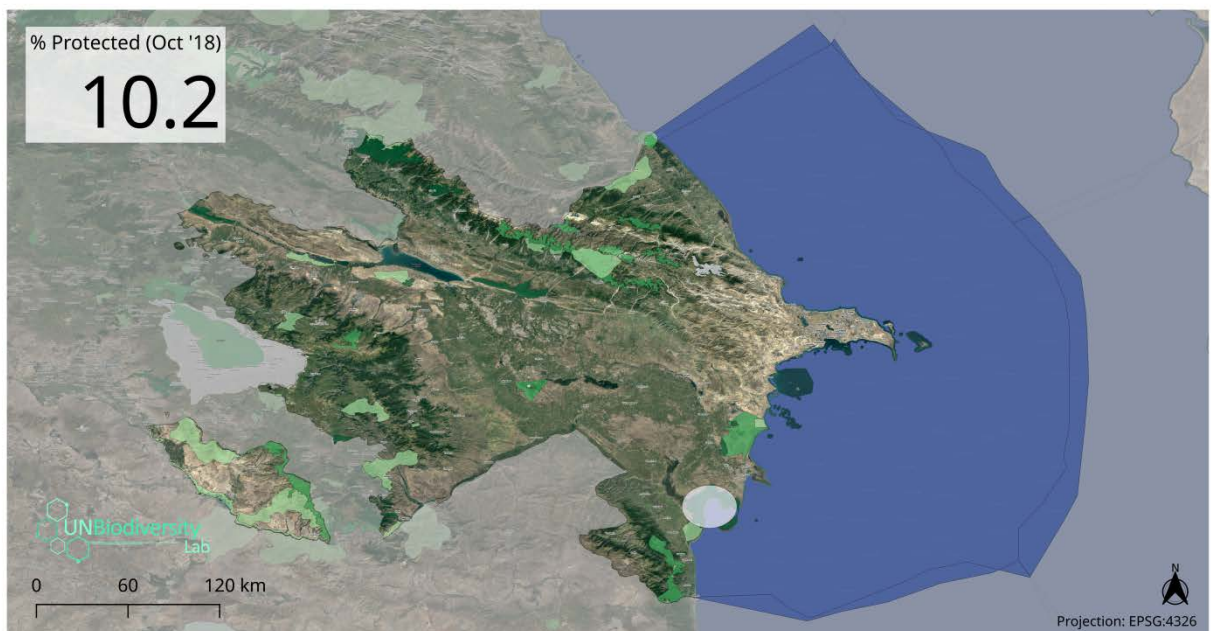
Species Richness
High
Low

Data: Threatened Species Richness (IUCN)
Country: Azerbaijan

Data Sources:
The IUCN Red List of Threatened Species, Version 3. <http://www.iucnredlist.org>.
Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit

gef
Convention on Biological Diversity
UN environment
United Nations Development Programme
UN DIP
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% Protected (Oct '18)
10.2

WDPA IUCN Category

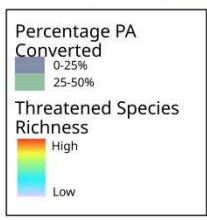
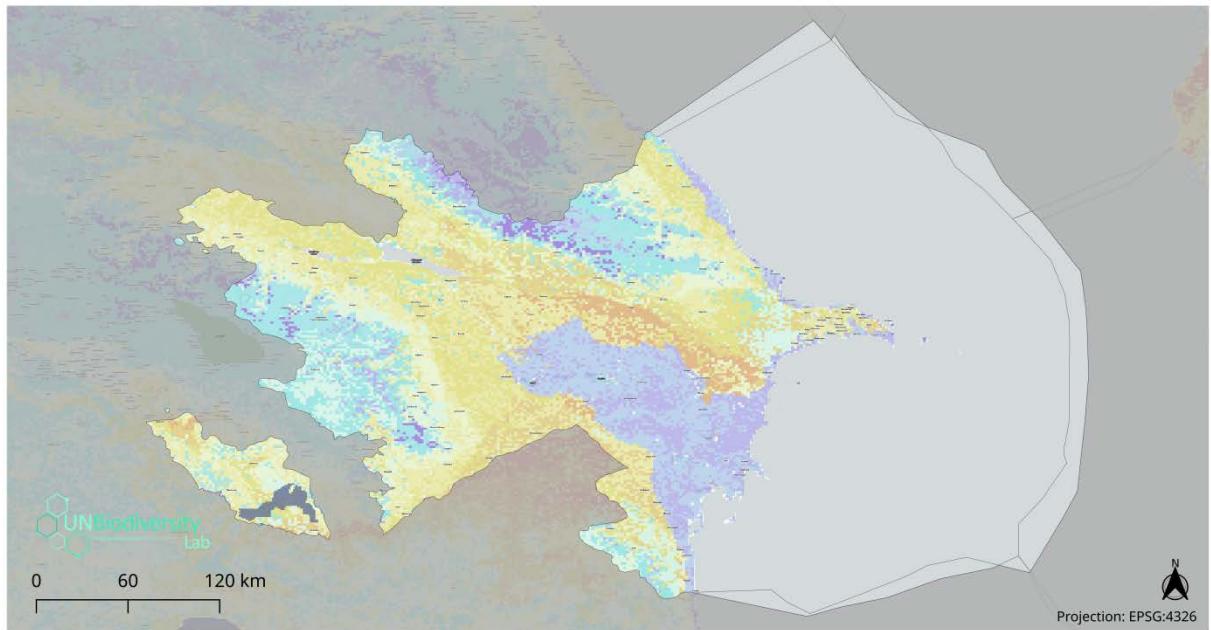
1a	Not Applicable
1b	Not Assigned
II	Not Reported
III	V
IV	VI

Data: Protected Area Coverage (Terrestrial)
Country: Azerbaijan

Data Sources:
UNEP-WCMC, IUCN, and NGS, 2018. Protected Planet: The World Database on Protected Areas (WDPA) [On-line], October 2018. Cambridge, UK: UNEP-WCMC and IUCN.
Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10.
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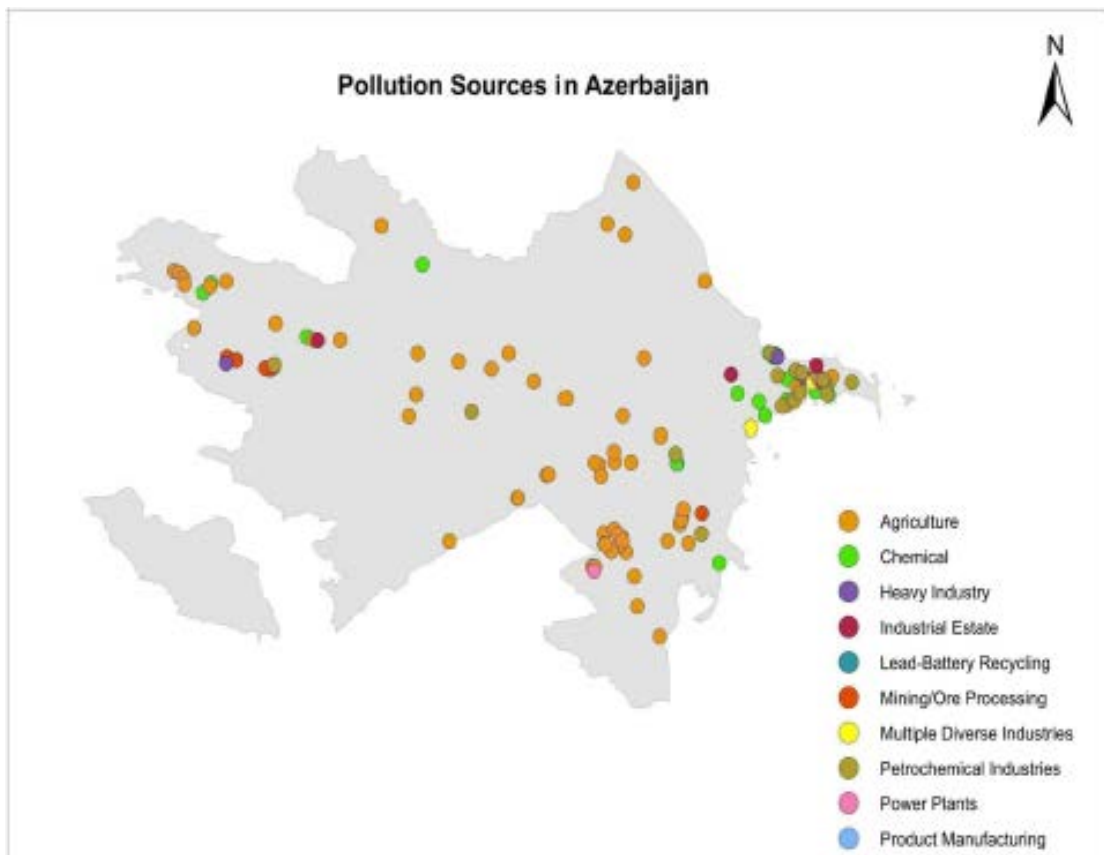
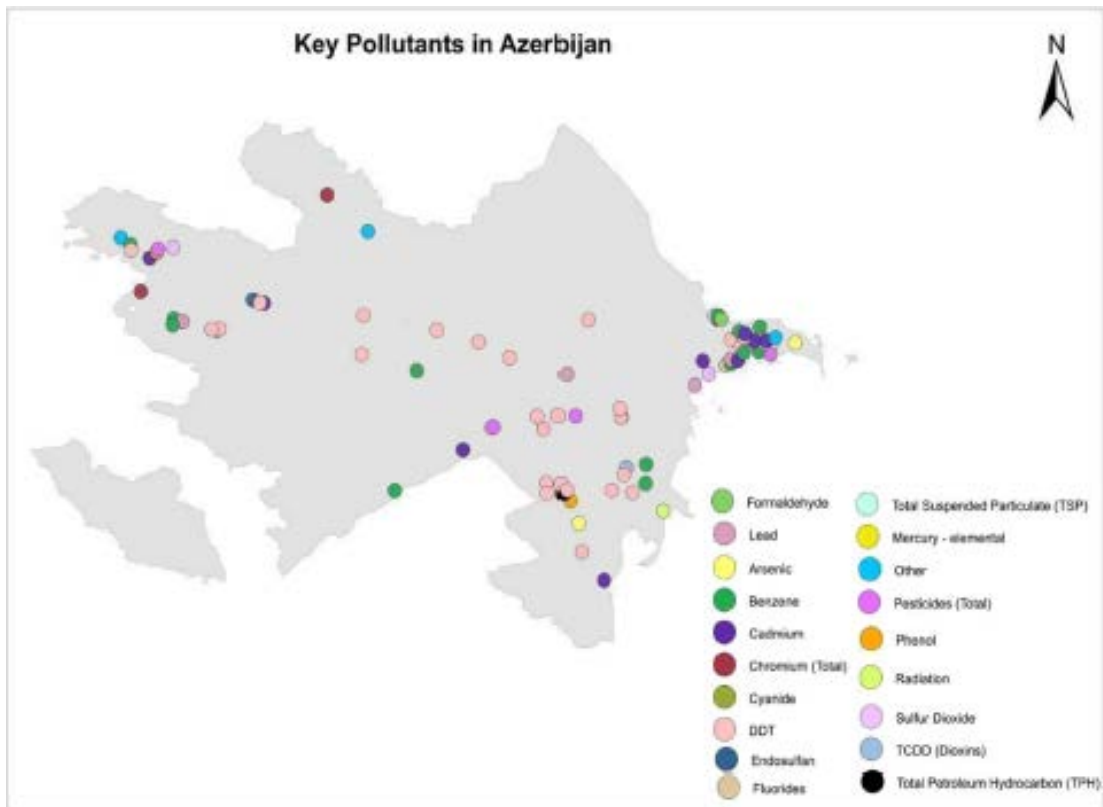
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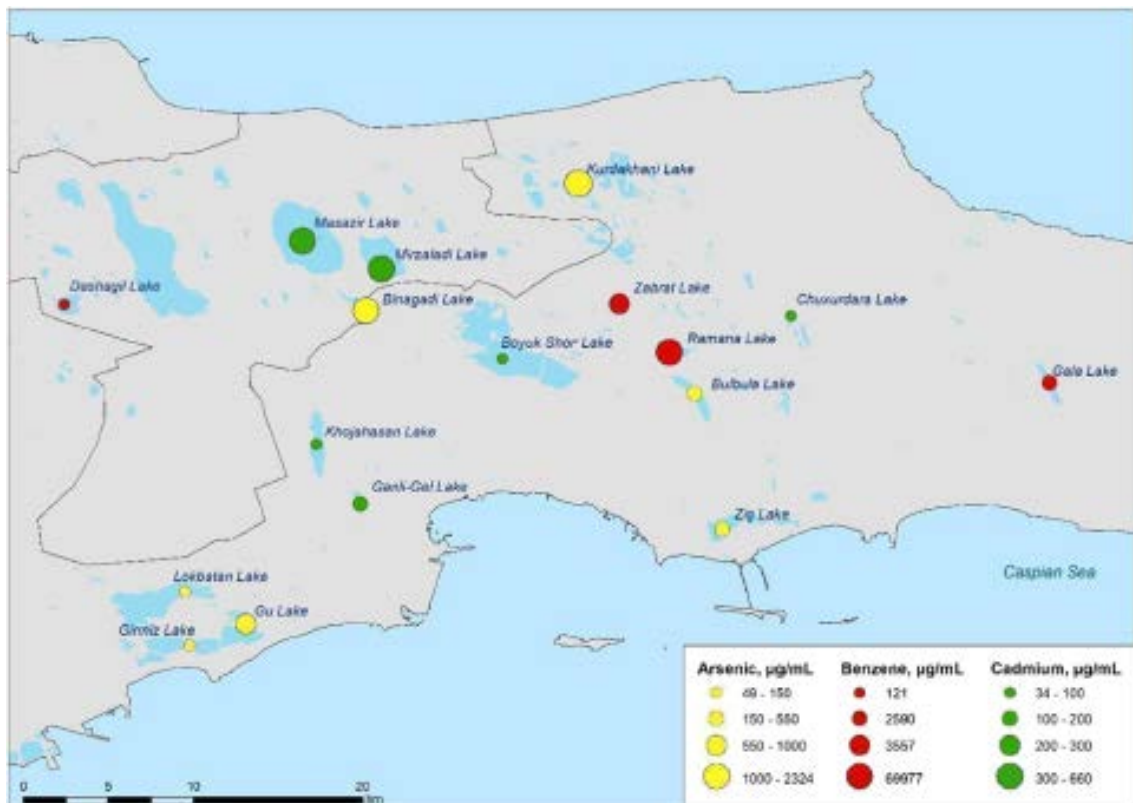


Data: **Threatened Species Richness (IUCN)**
within Effective PA Network

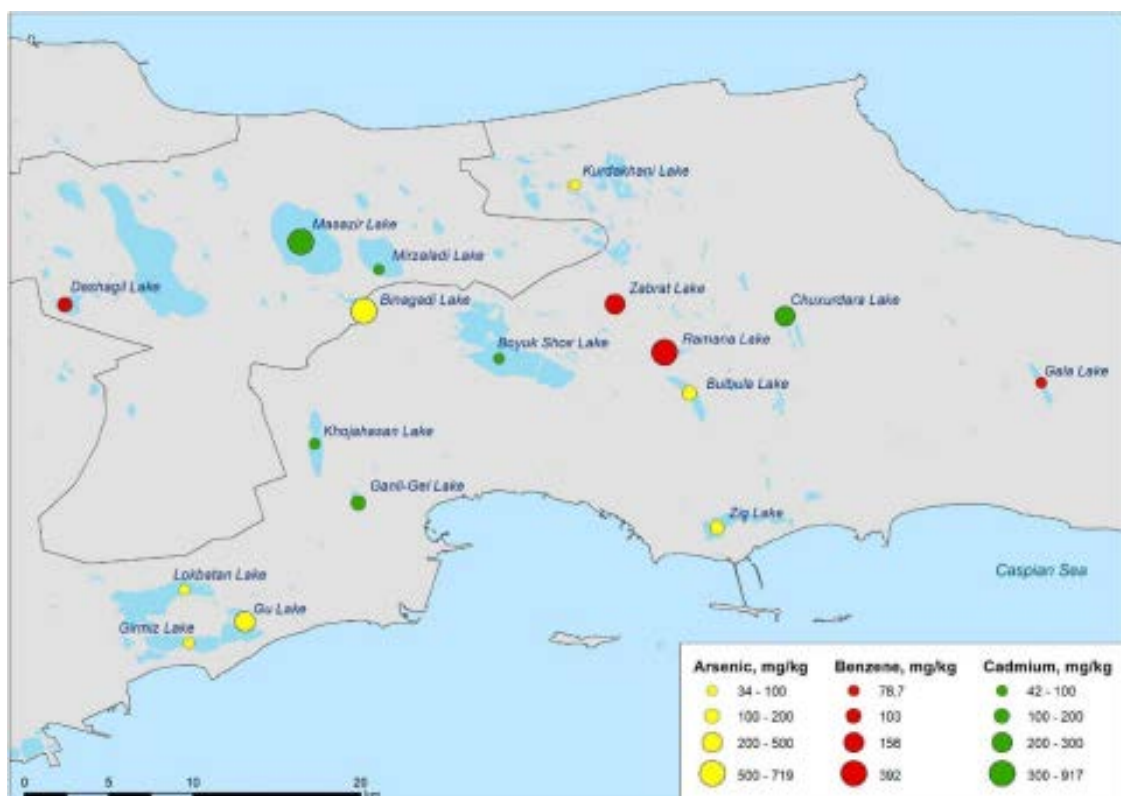
Country: **Azerbaijan**

Data Sources:
 Jones, K.R., Venter, O., Fuller, R.A., Allan, J.R., Maxwell, S.L., Negret, P.J., Watson, J.E.M., 2018. One-third of global protected land is under intense human pressure. *Science* 360, 788-791; The IUCN Red List of Threatened Species. Version 3. <http://www.iucnredlist.org>; Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 10; Global Administrative Unit Layers (GAUL), 2015. UN Cartographic Unit.





Concentrations of key pollutants in a water of lakes




Concentrations of key pollutants in sediments of lakes

Contributors

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Arzu Samadova	Consultant
Behruz Mahammadov	Consultant
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Rovshan Abbasov	Consultant
Sadagat Mammadova	Consultant
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Adalat Hasanov	Consultant
Tural Mammadov	Consultant

APPENDIX : Information related to the reporting party and development of the Six National Report

Information concerning reporting Party

CONTRACTING PARTY	REPUBLIC OF AZERBAIJAN
NATIONAL FOCAL POINT	
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FAX	+994125662610
E-MAIL	ALLAHVERDIYEV.R@ECO.GOV.AZ
SUBMISSION	
SIGNATURE OF OFFICER RESPONSIBLE FOR SUBMITTING NATIONAL REPORT	
DATE OF SUBMISSION	SUBMITTED ON THE 18 TH OF DECEMBER 2019 TO THE SECRETARIAT OF CBD

Institutional stakeholders

Sectors of Report	Ministry, Committee, Agency and Organization	Role in the preparation of report and extent of involvement
Biodiversity conservation	Ministry of Ecology and Natural Resources	Executing agency of the preparation of the report and main contributor of information.
Academia	National Academy of Sciences	Contributor of information and participant in consultative meetings
Sustainable agriculture	Ministry of Agriculture	Contributor of information
Climate change	Ministry of Ecology and Natural Resources	Executing agency of the preparation of the report and main contributor of information
Non-governmental Organization	Rec -Azerbaijan	Contributor of information and participant in consultative meetings.
Energy	Ministry of Industry, SOCAR	Contributor of information.
Fisheries	Ministry of Ecology and Natural Resources	Executing agency of the preparation of the report and main contributor of information
Forestry	Ministry of Ecology and Natural Resources	Executing agency of the preparation of the report and main contributor of information
Forestry	Ministry of Ecology and Natural Resources	Contributor of information,
Legislation	Ministry of Justice	Legislative support
Awareness and Education	Ministry of Education	Support in awareness-raising and education
Trade	State Custom Committie	Contributor of information
Tourism	State Tourism Agency	Contributor of information
Health	Ministry of Health	Contributor of information
Local administration	Municipalities	Contributor of information