

**Islamic Republic of Iran**

**Revised National Biodiversity  
Strategies and Action Plan  
(NBSAP2)  
2016-2030**

**Department of Environment  
Deputy for Natural Environment and Biodiversity**

**2016**

## Forewords



Islamic Republic of Iran covers 164.8 million hectares situated in the crossroad of three climatic zones, namely the Mediterranean, the arid West Asian and the temperate humid/semi-humid Caspian. Diverse topography and geological formations and anthropological characteristics, led this blessed land to a varied and unique biological diversity. Therefore Iran plays an important role in West Asia for conservation of biological diversity due to its large size and varied ecosystems.

We all agreed that we should live in harmony with nature, as an essential condition for human well-being, as life depends on the conservation and sustainable use of biodiversity.

President Rouhani has underlined that his administration pays great significance to the protection of environment and called it as "the government of environment" and emphasised "if environment is not taken care of sustainable development, technological development and human health cannot endure."

To achieve this and to prepare NBSAP2, we have committed ourselves to work with all relevant stakeholders, at the national and local levels, in order to mainstream the conservation and sustainable use of biodiversity in sectoral and cross-sectoral policies, plans and programs.

I sincerely appreciate the Steering Committee members of the NBSAP2 and all who have supported us to prepare this document. The challenge we now face is to take the necessary further steps and actions for conservation of biodiversity collectively. This is a joint task and I would like to request all stakeholders and national and international players to contribute to the effective implementation of Iran's Biodiversity Strategy and Action Plan.

**Dr. Masoumeh Ebtekar,  
Vice President of the Republic &  
Head of the Department of Environment**



Islamic Republic of Iran is committed to the objectives of the Convention on Biological Diversity and in line with its Strategic Plan for Biodiversity and Target 17 of the Aichi Targets, assessed and updated its national Biodiversity Strategy and Action Plan.

The NBSAP1 of Iran prepared through a systematic process and submitted to CBD in 2006, with 4 strategies and 25 headline activities, which have been approved by the High Council of the Environment under the chairmanship of the President of the Republic. Those four national strategies still are valid and considered as the Principles of the second National Biodiversity Strategy and Action Plan (NBSAP2).

To achieve this, Iran initiated a review process of measuring the progress and updating the 2006 version under supervision of H.E. Dr. Masoumeh Ebtekar the Head of the Department of Environment, and a Steering Committee in consultation with relevant stakeholders.

The NBSAP2 strategic goals, targets and activities are developed based on the current situations and needs, not only at the national level, such as the Macro-policies on Environment and draft 6th National Development Plan, but also the international approaches including Aichi Targets and globally agreed Sustainable Development Goals (SDGs) .

Mainstreaming Biodiversity across government and society, promoting awareness and public participation, integrated biodiversity monitoring, assessment and reporting, reducing pressures on biodiversity and promoting sustainable use of natural resources, and integrated conservation of biodiversity are four strategic goals of the new NBSAP, with this hope that sectors which have impacts on biodiversity, adopt integrated approaches to implement it.

**Dr. Farhad Dabiri**  
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***In addition, a large number of experts and institutes have contributed directly or indirectly to this report with data, information, informal documents and other materials. Co-authors would like to express their appreciation to the UNEP World Conservation Monitoring Centre, members of the High Council on Forest, Rangelands and Watersheds, the Japan International Cooperation Agency (JICA), and University College of Environment; as well as following colleagues:***

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## Acronyms & Abbreviations

CDM	Clean Development Mechanism
CBD	Convention on Biological Diversity
CMS	Convention on Migratory Species
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CEP	Caspian Environment Programme
CHM	Clearing House Mechanism
DoE	Department of the Environment
EIA	Environmental Impact Assessment
FAO	Food and Agriculture Organization of the United Nations
FRWO	Forest, Rangeland and Watershed Organization of Iran
FYDP	Five-Year Development Plan
EPEA	Environmental Protection and Enhancement Act
ECO	Economic Cooperation Organisation
ECO-IEST	ECO Institute of Environmental Science and Technology
GEF	Global Environment Facility
GIS	Geographical Information System
IUCN	International Union for Conservation of Nature
JICA	The Japan International Cooperation Agency
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
MEA	Multilateral Environmental Agreement
MFA	Ministry of Foreign Affairs
MoAJ	Ministry of Agricultural Jihad
NAP	National Action Plan to Combat Desertification
NBSAPs	National Biodiversity Strategy and Action Plans
NCRE	Non Conventional Renewable Energies
NCSA	National Capacity Self-Assessment
NCSD	National Committee for Sustainable Development
NIP	National Implementation Plan
NDP	National Development Plan
NSESD	National Strategy for the Environment and Sustainable Development
OPS4	Fourth Overall Performance Study
ROPME	Regional Organization for the Protection of the Marine Environment, (Kuwait Convention)
SCE	Supreme Council of Environment
WHC	World Heritage Convention
UNESCO-MAB	UNESCO- Man and the Biosphere Programme
UNCCD	United Nations Convention to Combat Desertification

## Executive Summary

The Islamic Republic of Iran covers 164.8 million hectares. The complex and diverse climates, topography, geological formations and anthropological management of natural resources have led to a varied and unique biological diversity. Over 8,200 species of plants, 197 species of mammals, 535 species of birds, 227 species of reptiles, 21 species of amphibians, 160 species of freshwater fishes and 710 species of marine fishes have been recorded in Iran. This includes a large number of wild relatives of commercial species both plants and animals, confirming Iran's status as a Mega-diverse country and a major centre of biodiversity.

The Caspian Hyrcanian forests in north and Persian Gulf coral reefs in south are also include a wide range of ecosystem, species and genetic diversity. Several Iranian wetlands are globally significant; hosting large populations of migratory birds for wintering or use them on their migration routes to and from Africa or Indian sub-continent. The central steppes are the world's last remaining home of the Asiatic Cheetah (*Acinonyx jubatus venaticus*), which is a critically endangered. The Alborz and Zagros mountain ranges are also important centres of national biodiversity.

In line with Target 17 of the Aichi Biodiversity Targets, the Islamic Republic of Iran initiated the process of revising and updating the 2006 version of its NBSAPs which have been approved by the High Council of the Environment. NBSAP1 of Iran which was submitted to CBD in 2006, focused on four Strategies and an Action Plan comprising 25 headline activities and 166 activities. In order to assess the implementation of the NBSAP1, an analysis of progress was undertaken at the activity levels. Based on this analysis, the highest proportion of activities have partially achieved or achieved to a limited extent. Results showed that, although implementing the NBSAP1 in practice was progressive, it should be continued in among NBSAP2.

The current version, which is a consolidated document, is following previous Strategies, although its goals are developed based on the current situations and needs not only within the country, such as the National Macro-Policies on Environment (Endorsed by the Supreme Leader) and 6th National Development Plan (2016-2020), but also the international approaches including Aichi Targets and SDGs. So the NBSAP2 covers 4 strategic goals, 24 national targets and 99 activities.

It is important that the NBSAP2 contributes to the objectives of the 6th National Development Plan that has been approved by the Council of Ministers and is under consideration by the Parliament.

# Section 1

## INTRODUCTION

Iran's various cultures and ethnicities, varied climatic conditions and long history of agriculture, have contributed to the richness and uniqueness of biodiversity in Iran. However, the country is considered predominantly dry, where out of a total land area of 164.8 million hectares (ha), 86 million ha (52.4%) are rangelands; 14.2 million ha (8.6%) forests and 32 million ha (19.5%) deserts including bare salty lands. Approximately only 18.5 million ha (11%) are under cultivation, of which 8.5 million ha are irrigated and 10 million ha are rain fed.



## Values of Biodiversity and Ecosystem Services at the National Level

**Current Status:** The Islamic Republic of Iran covers 164.8 million hectares between latitudes 25° and 40° N, situated where three climatic zones meet the Mediterranean, the arid West Asian and the temperate humid/semi-humid Caspian zone. Iran is bordered by Azerbaijan (432 km) and Armenia (35 km) to the north-west; Turkmenistan (992 km) to the north-east; Pakistan (909 km) and Afghanistan (936 km) to the east; Turkey (499 km) and Iraq (1,458 km) to the west; the Caspian Sea to the north (1000 km); and the waters of the Persian Gulf and the Sea of Oman to the south (3200 km). Iran is the eighteenth largest country in the world and the second largest in the Middle East.

Various cultures and ethnicities, varied climatic conditions and a long history of agriculture have contributed to the richness and uniqueness of biodiversity in Iran. However, the country is considered predominantly dry where, out of total land area of 164.8 million hectares (ha), 86 million ha (52.4%) are rangelands; 14.2 million ha (8.6%) forests and 32 million ha (19.5%) deserts including bare salty lands. Approximately only 18.5 million ha (11%) are under cultivation, of which 8.5 million ha are irrigated and 10 million ha are rain fed. Due to Iran's location in the arid and semi-arid region of the world and its geographic features, the country receives an average annual rainfall of 240 mm, less than a third of the world's average precipitation. However, annual precipitation in the inland dry deserts of the country can be as low as only 10 mm. As a result, most rivers are seasonal and their flows depend heavily upon the amount of rainfall.

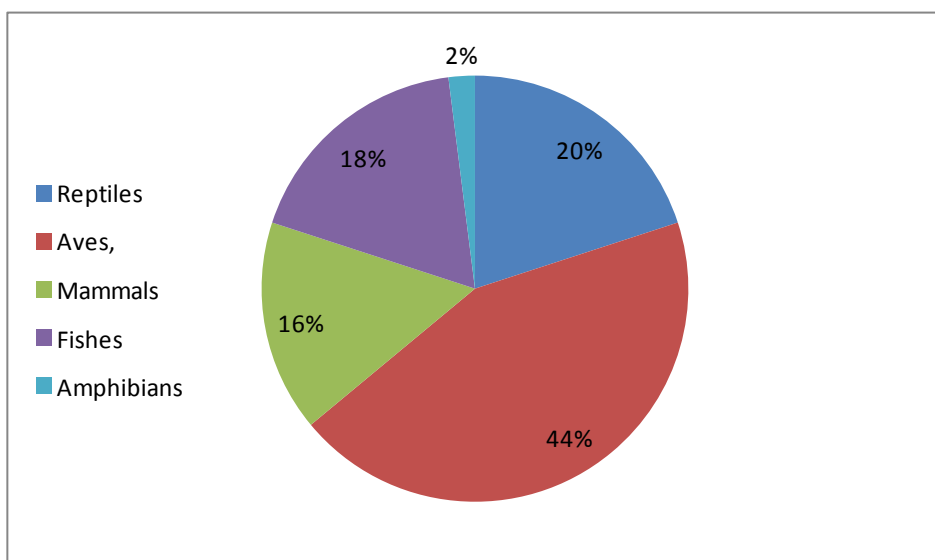
Habitat diversity in Iran allows for a wide range of animals to inhabit in the country. Bears, Caucasian Black Grouse, Sacred Ibis, Eurasian Lynx, River Trout and Crocodile can be found in these habitats. Red Deer and Roe Deer can be found in the Hirkanian forests, Urial Sheep in steppe hills, Wild Goats, European Snow Vole, Caspian Snowcock and Caucasian Agama as well as Leopards on the cliffs and bare heights of dry areas, wild asses, Gazelles and Cheetahs on the desert plains can all be found in Iran. The Pheasant, Partridge, Stork, Saker and Barbary Falcon, Golden and Imperial Eagle are also native to Iran. The Persian Leopard is said to be the largest of all the subspecies of leopards in the world. The main range of this species in Iran closely overlaps with that of Bezoar Ibex. Hence, it is found throughout the Alborz and Zagros mountain ranges, as well as smaller ranges within the Iranian plateau. The leopard population is very sparse, due to loss of habitat, loss of natural prey and population fragmentation.

The consequences of development on the natural environment are a growing concern in Iran. During the last century, increasing road expansion has exerted substantial pressure on the protected areas and fragile ecosystems. The negative effects of road expansion on wildlife are well known, particularly for large and rare carnivores with large territory ranges and low population densities.

Most of Iran is located in the Palearctic realm and is considered the centre of origin of many genetic resources of the world, including many of the original strains of commercially valuable plant species such as wheat or medicinal and aromatic species.

The southwest has some Afro-tropical features, while the southeast has some species from the Indo-Malayan sub-tropical realm. There is no clear estimation on the rate at which genetic diversity is being lost in Iran. However, recent studies and population declines indicate that genetic erosion is rapidly increasing. Low genetic variation may also limit species adaptation to disease or climate change.

Approximately 8,200 plant species from 167 families and 1,200 genera have been recorded in Iran. Nearly 20% of these species are considered endemic. Field surveys confirmed the presence of 521 species of birds, 194 mammals, 203 reptiles, 22 amphibians and 1,080 species of fish (Figure 1). Iranian fish resources include 900 species from the Persian Gulf and Sea of Oman (with 9 endemic species) and 180 species from the Caspian Sea (with 10 endemic species) and living in inland and fresh waters (with 15 endemic species). There are 12.4 million hectares of woodland and more than 10,000 hectares of mangroves along the Persian Gulf and Sea of Oman coast. Ecosystem diversity of marine and coastal zones in the north and the south of the country consist of 25 ecological types and units, most importantly coral reefs, bays and small islands.



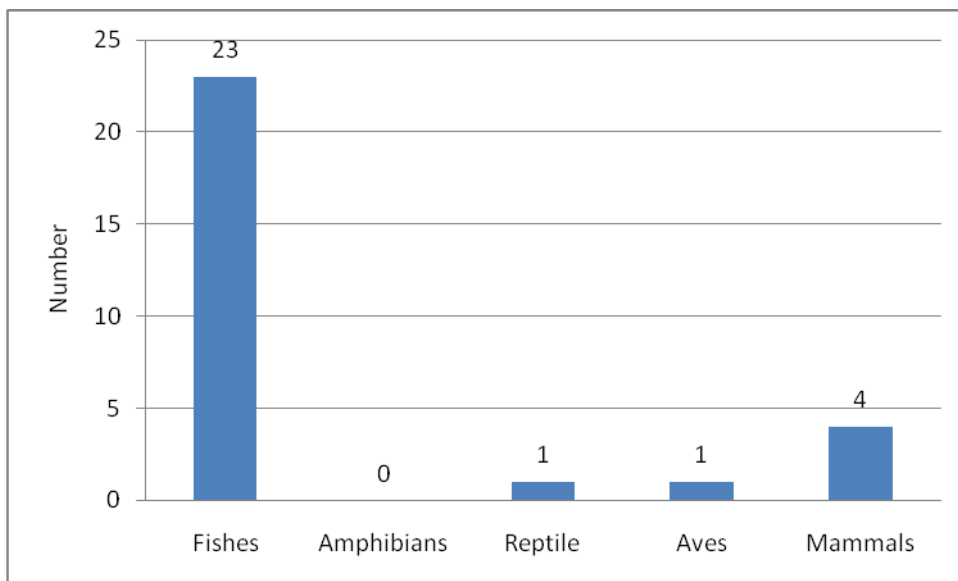
**Figure 1. Distribution of Frequency of Species of each class of Iran’s vertebrates (%)**  
(Source: SOE of Iran 2016)

In Iran, about 8,200 plant species grow out of which number, 7,709 species belong to flowering plants (including 78% Magnoliopsida and 12% Monocotyledon), 41 species belong to pteridophyte, 13 species belong to gymnosperms and 437 species belong to Bryophyta (studies of SoE Research group). Iran's largest plant families include peas, sunflower, wheat, clove, mint, wolfsbane, cabbage, rose, beet and buttercup. Among Iranian plant species about 536 tree and shrub species, 134 aquatic and semi-aquatic species, 101 parasitic and semi-parasitic species and 165 halophytes species count for the total plant species.

**Vegetation Regions of Iran:** Iran, due to its specific geographical location, is located at the intersection of different vegetative zones. This diversity has created diverse habitats and, consequently, has led to the emergence of massive plant diversity. In terms of plant geography, Iran is located in 2 different Phyto geographical kingdoms, namely arctic (Holarctic) and old Equatorial (paleotropical). Also, Iran is divided into five vegetation regions, namely Hyrcanian (Caspian), Arasbaran, Zagros, Irano-Turanian as well as the Persian Gulf and the Gulf of Oman.

**Alien Species:** According to the definition of IUCN, alien species include plant, animal or other microorganisms which have been introduced consciously or unconsciously by humans into places out of their natural distribution area (in regions where they are not native), reproduce and increase their population and therefore have a negative impact on native species and ecosystems of that region. Alien species may be introduced to adjacent ecosystems or distant ecosystems from each other. In addition to climate change, these species are important factors that threaten the biodiversity and ecosystem and they may pose harm to agriculture, fisheries, forestry, tourism and business.

Therefore, investigating the condition of the species and the condition of the host ecosystem before entering new species from different ecosystems is necessary for prevention of further major problems. Currently, 23 alien fish species and 4 mammalian species have been identified and recorded in the country (Figure 2) some of which have been shown to have damaged the ecosystem to different extents.

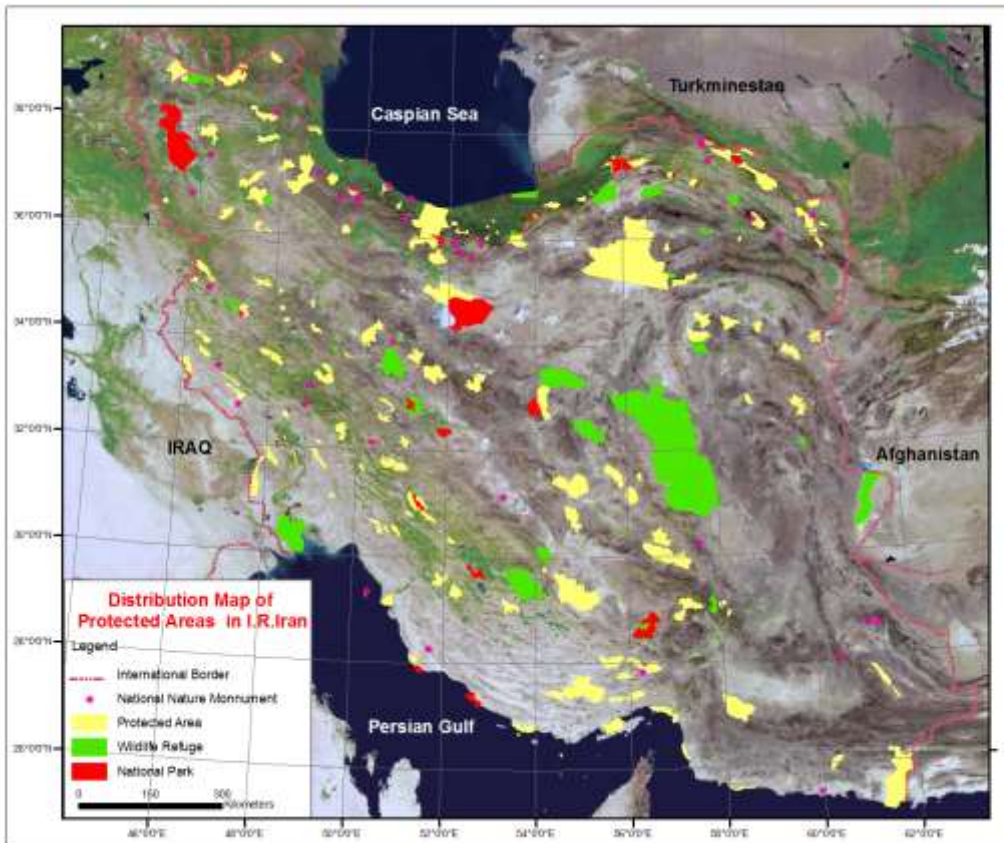


**Figure 2. The number of invasive species of vertebrate classes [15, 20, 21, 26, 28, 32], (Source: SOE of Iran 2016)**

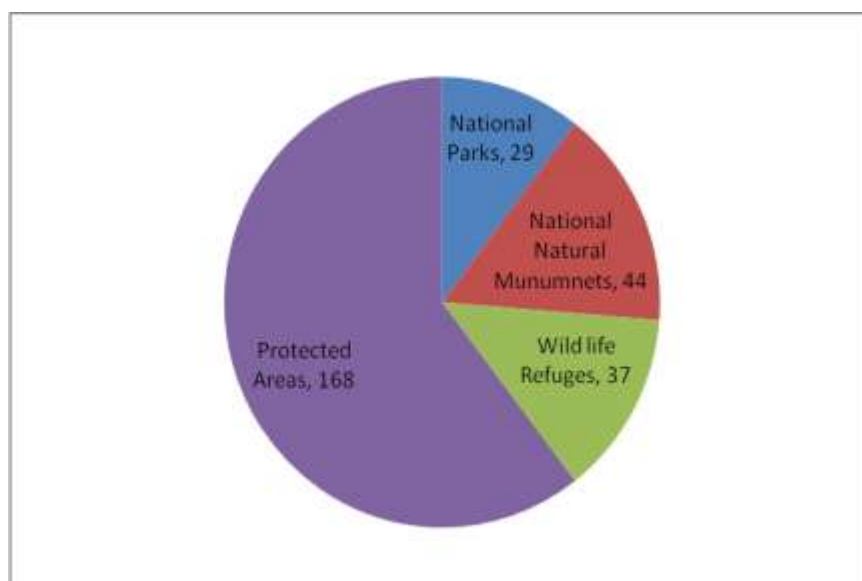
**Protected Areas:** The DOE has a particular responsibility for protected areas. In Iran, areas protected by the Department of Environment (DoE) cover almost 17.11 million hectares, covering over 10.34% of the national land area. The DoE managed areas have been classified into four management categories as: “National Parks”, “Wildlife Refuges”, “Protected Areas” and “National Natural Monuments”.

In addition, until now there have been more than 154 Non-hunting areas under the management of the DoE, with a total area of more than 5 million hectares.

Also there are 24 Ramsar Sites and several Important Bird Wintering Areas in the country.

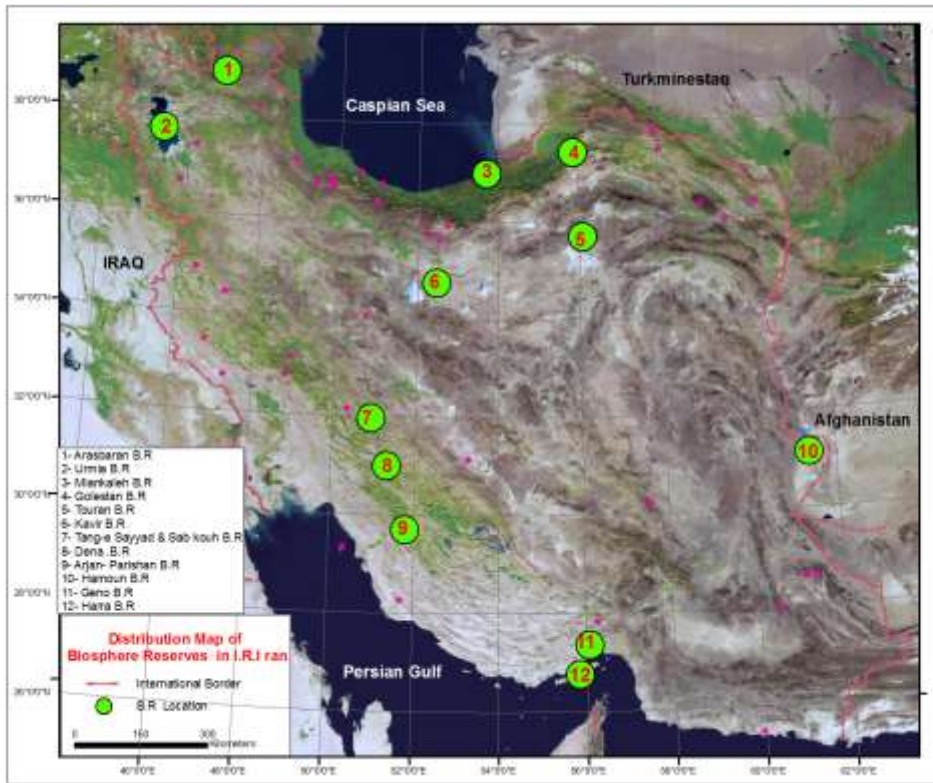


**Map 1: Distribution of Protected Areas of Iran as of October 2016**  
(Source: DoE 2016)



**Figure 3. Four categories of protected areas of Iran**  
(Source: DoE 2016)

**Biosphere Reserves of Iran:** Iran participates in the UNESCO Man and the Biosphere Programme, and has designated 12 Biosphere Reserves covering a total area of 5.6 million hectares so far.



**Map 2: Distribution of Biosphere Reserves of Iran**  
 (Source: DoE 2016)

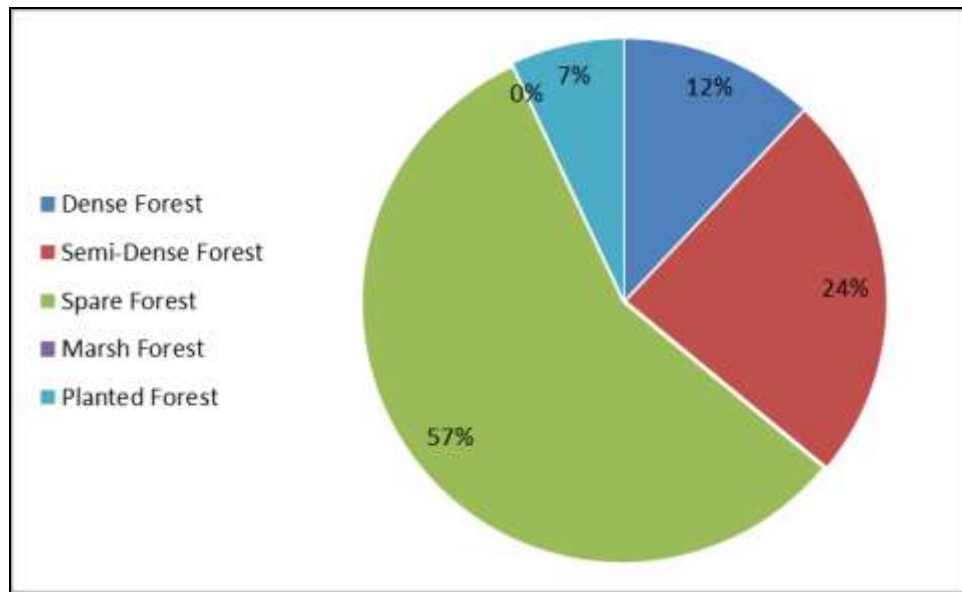
**Forests:** According to the definition of Forests, Range and Watershed Management Organization, a forest (including land and water) is a land that is covered more with trees and shrubs and other woody vegetation (wood) and wild herbaceous vegetation, provided that the land area is no less than half a hectare and the canopy cover of its trees is not naturally less than 5%. Therefore, it includes woodlands and shrub-lands (a land of which the canopy cover (shadow area) of its wood elements (trees and shrubs) is between 5–10 % of the area of that land).

It is a large area covered with trees, shrubs and herbaceous species that, along with wild animals, shares a courtyard of plants and animals which, under the influence of soil and climatic factors, is able to maintain its natural balance.

Formal reports shows that canopy density in a dense forest is more than 50%, in the semi- dense forests it is about 25 to 50% and, in sparse forests, it is about 5 to 25%. Canopy density in dense forests (north forests) is defined as being more than 70%, in semi -dense forests 40% to 70% and in sparse forests 10% to 40% (Figure 4). Accordingly, the area of Iranian forests has been declared to be about 14 million hectares which comprises 8.8% of the whole country's area. Forest per capita in the country is 0.17 hectares, while world per capita forest is 0.62 hectares.

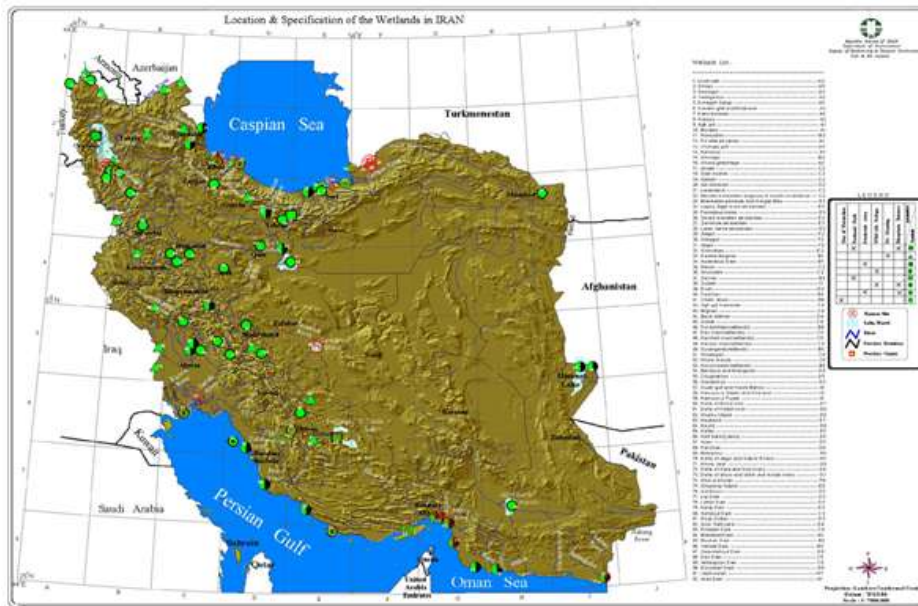
Dense and semi-dense forests with an area of 2.5 million hectares compose nearly 36% of the country's total area and include a total of 36% of Iranian forests, which indicate the poor forest cover of the country.

According to the UN Food and Agriculture Organization (FAO) forest contains areas in which canopy cover should be at least more than 10% and biomass should not be less than half a hectare and the trees and shrubs should not be less than a metre in height. Accordingly, the FAO estimates Iran's forest area at more than 11 hectares.



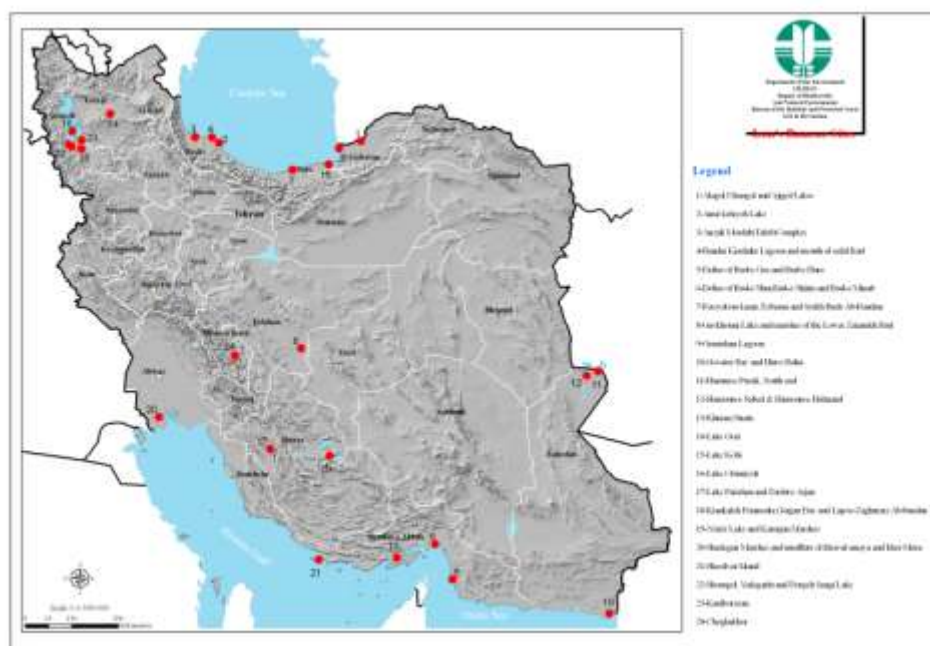
**Figure 4. Different forest types in Iran**  
(Source: SOE of Iran 2016)

**Wetlands:** Iran's large wetlands cover 1.7% of country's land with an area of about 2.8 million hectares. In total, 24 of them with the area of 1.4 million hectares are in the wetland list of the Ramsar Convention. Some of these wetlands are among the four protected areas of the Department of Environment in addition to being recorded in the Ramsar Convention. From studied wetlands of the country by 2013, about one third of them are under pressure or in a critical condition.



**Map 3. Distribution of important Iranian wetlands**  
(Source: DoE 2016)

The wetlands of Iran are globally significant; large populations of migratory birds winter at these wetlands or use them on their way to and from wintering areas in Africa or the Indian sub-continent. In order to conserve the existing biodiversity of the country, representative samples of the nature of land have been selected and are being conserved under different categories such as protected areas, national parks, wildlife refuges and national natural monuments.



**Map 4. Distribution of Iranian Ramsar Sites**  
(Source: DoE 2016)

## **The Country's Signature and Ratification of MEAs**

Iran has accepted international legal responsibilities, which in part reflect its moral, ethical and scientific obligations to protect its biodiversity and biological assets. This, along with the large size of the country, means it has unsurpassed opportunities for formulating and implementing long term conservation plans.

The DOE is responsible for the implementation of the following international biodiversity related agreements:

- Convention on Biological Diversity (CBD);
- Convention on Wetlands (Ramsar);
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);
- World Heritage Convention (WHC);
- Regional Organization for the Protection of the Marine Environment (ROPME) (Kuwait Convention);
- Framework Convention for the Protection of Marine Environment of the Caspian Sea (Tehran Convention).

Besides, Iran has a bilateral environmental agreement and cooperation with the governments or research institutions of many countries. These MEAs oblige signatories and parties to provide basic information about the distribution and abundance of natural resources which are necessary for long-term sustainable management and conservation of the environment.

## **The Predecessor Institution of the Department of the Environment**

Known as the Hunting Centre, this was formed in 1956. It was mandated to supervise and conserve important habitats and control hunting. In 1967, under the new designation of the Game and Fish Organization, it expanded to take full responsibility for supervision and protection of wildlife in the country's wide variety of ecosystems. The organisation was restructured as the Department of the Environment in 1974. Its agenda was upgraded to ensure the enhancement and promotion of policies that were designed to establish a balance between the needs of social development and environmental protection.

With the ratification of the 1979 Constitution of Iran, new legislative ground was forged and today, environmental protection is an important part of the country's legal framework. The Department of Environment, under the auspices of the Vice-President of the Republic, has been designated as the foremost body for the preparation of and oversight over environmental laws and regulations.

The DOE's operational mandate, including a degree of monitoring and oversight throughout the country is delegated to its provincial offices. The offices are in close contact and work in coordination with other local and provincial authorities, to ensure conservation of natural resources and habitats, as well as monitoring programs and projects and their environmental impacts on ecosystems.



However, due to the fragmentation of tasks and functions among several ministries and organisations, the involvement of other government institutions in this multi-disciplinary endeavour is indispensable. Accordingly, in preparation and enforcement of climate change or biodiversity laws and regulations, the DOE would share responsibilities and/or seek the proper intervention /support of other government institutions, such as the Ministry of Agricultural Jihad (MoAJ), the Ministry of Petroleum and the Ministry of Energy.

In order to account for various technical considerations and the legal nature of environmental issues, the National Committee for Sustainable Development (NCSD) was established in May 1994, upon the approval of the Supreme Council of the Environment, to ensure national coordination amongst all stakeholders. Its creation was also an outcome of the 1992 Rio Summit. The secretariat of NCSD is hosted within the Department of the Environment, and the Committee is presided over by the Vice-President of the Republic and Head of the DOE. There are 18 members in the National Committee including the Chairperson, Vice-Chair and representatives from the Ministries of Energy, Industries and Mining, Foreign Affairs, Agriculture Jihad, Housing and Urban Development, Science, Research and Technology, Petroleum, Interior, IT and Communications, and Health and Medical Education; and those from the Management and Planning Organization, Meteorological Organization, Department of the Environment, NGOs' Network, Academy of Science and one member from the SCE. Some representatives of other governmental or non-governmental organisations are invited to attend the meetings on an *ad hoc* basis and have the right to vote.

To implement 17 SDG targets at national level, 16 sub-committees have been established (2 targets compiled in one sub-committee) under the guidance of NCSD. Each of these sub-committees is in charge of different targets and they are chaired and organised by a ministry or organisation other than the Department of the Environment. These subcommittees, in addition to the technical, legal and political aspects of the SDG and related Conventions, should also address preparation of national reports to the Conventions, and propose, approve and monitor implementation of the relevant national and regional environmental projects. In addition, national steering committees are in place to coordinate, monitor and evaluate the implementation of such projects. These steering committees should keep NCSD, and the supreme body, informed on a periodical basis.

## Threats to Biodiversity

Iran is located in a specific geographical location and is limited to the seas both in the north and south part of the country. These conditions, along with the Zagros, Alborz, Kopet Dag and Makran mountain ranges have led to the formation of the multiple ecosystems, distinctive vegetation, unique and rich habitats and impressive species diversity across the borders of Iran. This biodiversity has suffered major changes under the influence of excessive unsustainable development and population growth. In this way, now the country faces serious environmental challenges such as water shortages, desertification, habitat destruction, drying of wetlands, soil erosion, pollution, etc. Unfortunately, the threats and pressures on the environment are growing day by day. If enough attention is not drawn towards this process, soon the country will be faced with a crisis which could be a threat to the human life of Iran.

Destruction factors in Iran, associated with biodiversity values and conservation efforts, are not possible without considering local needs and issues. Several programmes are under implementation to reduce the trend of forest disturbance, to make decisions about the protection of these ecosystems and to help the conservation of plant diversity.

Climate change, water shortages and the continuation of droughts are among the serious threats to biodiversity in the past and future that must be considered accurately. The location of Iran in the dry belt and building dams illogically has not been ineffective in causing water crises and desertification of large parts of the country especially in a land where its ancestors knew, from many years ago, that the most important enemy of the water in that land is the sun and learned to conduct the water into underground and roofed water storage tanks. For this reason, special attention must be paid to water management because it plays a significant role in biodiversity conservation. The fires in the past few years have been extensive enough that they have caused fundamental concerns for the destruction of biodiversity. This trend will increase in the future according to recent droughts which show that ignoring those causes serious challenges to plant biodiversity and subsequently, animal biodiversity. Hunting and indiscriminate use of wildlife resources, despite training and support, are still considered as serious threat to the country. Permitting excessive hunting and a lack of proper management of wildlife can destroy the biodiversity in the future more than now. However, according to the documents, the number of areas managed by the Department of Environment (national parks, wildlife refuges, protected areas and national natural monuments) has increased, but facilities and human resources have not been provided in accordance with the needs.

This is to the extent that most of these new areas do not have enough facilities and organisational forces. So, the development of regions that are under the management of the department will not be helpful in conserving biodiversity but only in terms of organisational measures. This development should be balanced and provided with the necessary financial and human resources for protection so that it can achieve success in this regard.

The issue of the increase of the dust in the country is related to some other issues such as excessive livestock grazing, vegetation removal, the drying up of wetlands and

the expansion of farmlands and managing this depends on the correct management of other factors the ignoring of which will make the situation worse. Biodiversity is a good opportunity and field for investment, but there has been little investment in terms of biodiversity. Paying attention to education and research in the field of biodiversity is essential as a basis for substantive and preliminary planning. Paying attention to this concept and encouraging investment, especially by the private sector and involving local communities to exploit common interests is a strategic goal and should be the focus of the Department of Environment. Studying and identifying the species in the wildlife should be the first phase of the study. Fortunately, the number of identified species has increased dramatically over the years and this trend is promising to obtain detailed information about wildlife in Iran. Hence, the implementation of management programs may reduce degradation and improve the environment and at least provide stability for the current environment so that it will be possible to implement ecosystems and species restoration programs with careful management in line with what we have done and what we have lost in this process, but all of them require determination, commitment to environmental ethics, commitment and sufficient knowledge, enforcement and harmony between the people and government officials.

### **Analysis of the Causes and Consequences of Biodiversity Loss**

Economic and social developments that have taken place throughout the country in recent decades has had a wide and deep impact which accrues in the country, in terms of environmental pollution, soil erosion, deforestation and rangeland destruction. Although the transition from a traditional and semi-industrial society based on exports of raw materials to industrial society imposes costs and effects on the environment and causes some unsustainability, within this process we should make the effort, as far as possible, to reduce the costs of environmental degradation and change weaknesses into strengths and threats into opportunities.

### **Strengths and Opportunities**

- 1- Emphasis on protecting the environment and natural resources within national legislation (Articles 45 and 50 of the Constitution);
- 2- Improving environmental conservation and natural resources situation within the national planning system ;
- 3- Rich biological, climatic, plant and animal species diversity;
- 4- Considering environmental economics approaches within environmental conservation programs;
- 5- Active participation in the implementation of the obligations arising from the adoption of international conventions and protocols;
- 6- Facilities for studies, research, education and laboratory tools;
- 7- Increased willingness of people to participate in the Environment and Natural Resources activities;

- 8- A significant increase in graduated people within environment and natural resources fields;
- 9- Appropriate conditions in the country to produce and supply clean energy (solar, wind, hydropower, geothermal, etc.) and a recycling industry;
- 10- Growing trend in considering environmental principles by governmental and non-governmental industries.

### **Weaknesses and Threats**

1. Sensitivity and fragility of the natural environment of the country in terms of specific ecological structures and natural disasters;
2. Population growth and unbalanced distribution;
3. The lack of systematic land use planning;
4. Production and consumption patterns incompatible with the environment and increasing pollution;
5. Conflict, parallelism and inefficiency of some existing laws and regulations and lack of enforcement of laws;
6. The lack of integrated management of the natural habitats;
7. Limited water resources , due to the country's location in the arid and semi-arid zone and the decrease in the quantity and quality of resources;
8. Focus of the high level decision makers on short-term economic interests;
9. Lack of coordination and updated comprehensive information system;
10. Weak assessment and monitoring systems, long term control and evaluation on all industrial activities, infrastructure, goods and services and unsustainable use of natural resources;

# Section 2

## LESSONS LEARNED FROM THE NBSAP1

Iran is committed to the objectives of the Convention on Biological Diversity by submitting the first NBSAP in 2006 and implementing its National Biodiversity Strategy and Action Plan. The NBSAP1 focused on four Strategies and an Action Plan comprising 25 headline activities and 166 activities. Some of these objectives have been achieved but most of are still actively underway.

## NBSAP1

Iran is committed to the objectives of the Convention on Biological Diversity by implementing its National Biodiversity Strategy and Action Plan. Some of these objectives have been achieved but most of are still actively underway. Conservation measures on biodiversity and ecosystems in some sectors have made progress but there are still many challenges ahead. In general, it appears that the rate of decline in many species and ecosystems has increased during the past years. The reasons for the current major challenges on biodiversity conservation are as follows:

**Firstly**, ecosystems are disturbed by the dramatic increase in human activities and naturally occurring events such as climate change. As a result of the rapid population growth and more pressure on the utilisation of natural resources, the areas and biodiversity of different ecosystems including forest, rangeland, wetland, mountain, and marine and coastal ecosystems are decreasing.

**Secondly**, mainstreaming biodiversity conservation into other sectors and integrated the management of biodiversity in Iran is a new concept. Because it is new and challenging, it is very important to consider the time and the process of integrated management. The final results and achievements should not be expected very soon but it is very important to plan the right process and move forward gradually.

**Thirdly**, a great deal of progress has to be made in the areas of education and public awareness in order to achieve integrated biodiversity management at the national, provincial and local levels. Iran is a huge country with very diverse people and different cultures, livelihoods and behaviours. With this socio-economic complexity, community participation and stakeholders' involvement may be very welcome in some areas but there may be resistance to it at other sites.

**Fourthly**, administrative and technical capacity at different levels, as well as funding policies of government to conservation activities needs to be improved. To date the government has provided almost all funding to support biodiversity conservation for the nation; however, this is not enough to address all the challenges on the way.

The text of the IRAN National Biodiversity Strategies was finalised in June 2006, following the approval of the National Committee on Sustainable Development and approval of the Environmental High Council. Four national biodiversity strategies were recognised in this document:

1. Promotion of public awareness and participation in conservation of biodiversity
2. Formation of biodiversity information systems
3. Sustainable use of biodiversity resources
4. Integrated management of biodiversity

The first draft of the Action Plan for implementation of national biodiversity strategies was prepared in a participatory manner involving stakeholders from governmental, non-governmental and private sectors. A series of 25 headline activities were proposed, each with several activities and sub-activities (Table 1).

**Table1. Framework of implementation for Iran's NBSAP1**

<b>Headline Activities</b>	<b>Related Strategies</b>
1-Developing principles, guidelines, policies and execution procedures for preparation of formal education curricula in conservation of biodiversity	1,2
2. Developing principles, guidelines, policies and execution procedures for preparation of informal education modules in conservation of biodiversity	1
3. Awareness raising of specialists and other human resources in different fields of biodiversity	1
4. Utilisation plan for social institutions in conservation of biodiversity, emphasising promotion of awareness and strengthening of public participation, especially local stakeholders and communities	1, 3, 4
5. Comprehensive program for protection of traditional knowledge, innovations and practices related to conservation of biological diversity	2
6. Strengthening of research infrastructures related to conservation of biodiversity	2, 4
7. Establishment and development of national biodiversity assessment, monitoring and reporting	2, 3
8. Compilation of principles, strategies, policies and regulations for biotechnology development	
9. Developing and strengthening of international and regional cooperation in conservation of biodiversity issues	1, 3, 4
10. Compilation and implementation of strategies in development sectors	3, 1, 4
11. Strengthening of national legal and jurisdictional procedures for the conservation of biodiversity	4, 3, 2
12. Strengthening of economic and environmental considerations in national management systems of biological diversity resources	3, 2, 1
13. Strengthening land use planning in the country	2,
14. Developing principles, policies and regulations for application of environmental rules	3, 4, 2
15. Development of cleaner industrial production procedures	3, 2, 4
16. Developing sustainability indicators and their application plan in biodiversity related activities	3, 4, 2
17. Development and implementation of a comprehensive plan for ecotourism	1, 3
18. Development and implementation of an integrated plan for conservation of agro-biodiversity	4, 3
19. Establishment of the proper structure for coordinating governmental organisation activities related to biodiversity	4, 1, 2
20. Organising forest and rangeland rehabilitation activities	4, 3, 1
21. Supporting in-situ and ex-situ biodiversity, emphasising endangered plant and animal species	3, 4
22. Correction and strengthening of Protected Areas Network	4, 3
23. Confronting biodiversity-loss	, 3, 2, 4
24. Conservation of aquatic biomes	3, 4
25. Conservation of endangered species	3, 2, 4

**Table 2: Adjustment of NBSAP1 with international strategies and targets**

<b>National Strategies (NBSAP 1)</b>	Promotion of public awareness and participation	Formation of biodiversity information systems	Sustainable use of biodiversity resources	Integrated conservation of biodiversity
<b>Aichi Strategic Goals</b>	A D E	A C D E	A B C D E	A B C D E
<b>Aichi Targets</b>	1 3 14 17 18	3 12 13 15 16 17 18 19	3 5 6 7 13 14 16 17 18	2 4 5 6 7 8 9 10 11 12 14 15 17 18 20
<b>Related SDGs</b>	1 3 4 5 10 12 16 17	4 9 10 12	1 2 3 6 12 14 15	3 6 7 8 11 13 16

### **Challenges in Implementing the NBASP1:**

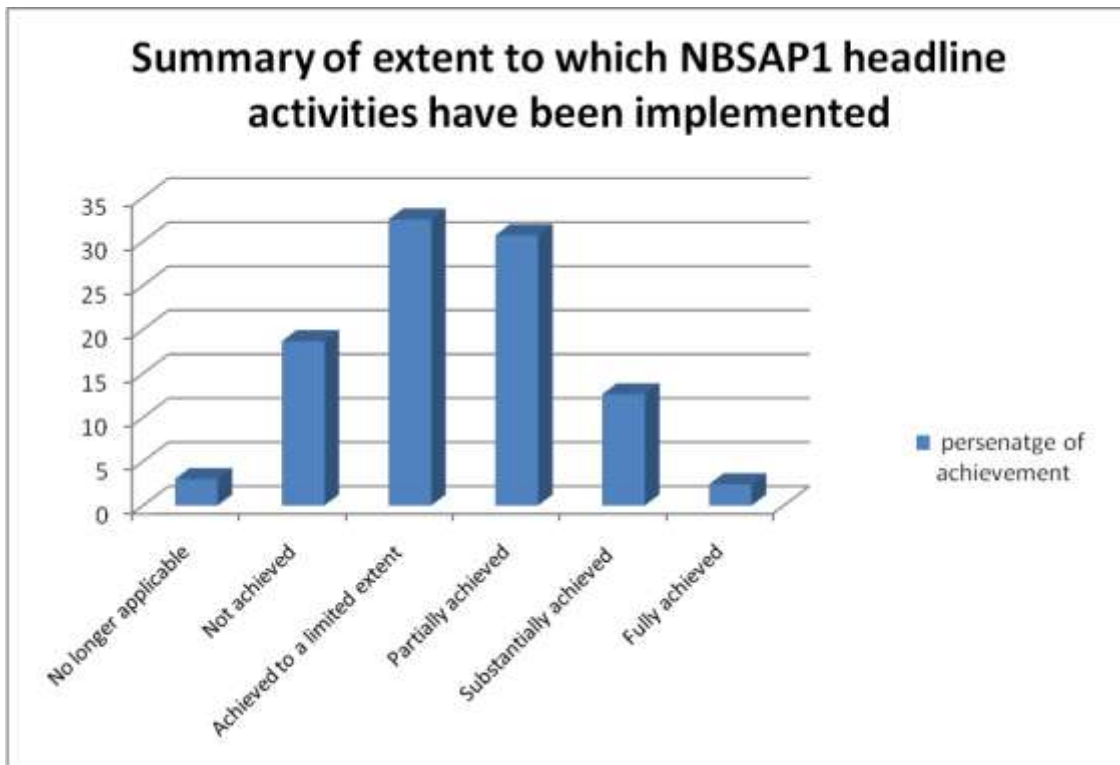
- Traditional vision on national development strategies
- Governmental turns and coordination gaps
- Sectoral overshadow on environmental projects
- Gaps in laws and regulations
- Lack of capacity building efforts (slow reaction to changes)
- Insufficient financial and technical support

The NBSAP1 focused on four Strategies and an Action Plan comprising 25 headline activities and 166 activities. In order to assess the implementation of the NBSAP1, an analysis of progress was undertaken at the activity levels. Progress towards



implementation for each of the 166 activities was rated in one of six categories: the results are summarised in Figure 4.

- 5- Fully achieved
- 4- Substantially achieved
- 3- Partially achieved
- 2- Achieved to a limited extent
- 1- Not achieved
- 0- No longer applicable



**Figure 5: Summary of NBSAP1 achievements**

According to the results shown in Figure 5, overall, 2.41% of the activities in the NBSAP1 have been fully achieved, 12.65% substantially achieved, 30.72% partially achieved, 32.53% achieved to a limited extent and 18.67% not achieved. In total, 3% of activities are no longer applicable, for example because they addressed a policy or institutional process that subsequently changed or fell away.

Based on this analysis, the highest proportion of activities was partially achieved or achieved to a limited extent. This result shows that, although implementing the NBSAP1 in practice was progressive, it should be continued within NBSAP2.

# Section 3

## NATIONAL CONSTITUTIONAL, LEGAL AND INSTITUTIONAL FRAMEWORK

In the national legal framework of Iran, there are many laws and regulations that deal directly or indirectly with biodiversity conservation. Some of the most important ones that are referred to in NBSAP2 are Article 50 of the Constitution of the Islamic Republic of Iran, National Macro-Policies on Environment (Endorsed by the Supreme Leader), the sixth Five-Year National Development Plan and Draft Strategies of the Department of Environment in line with the sixth Five-Year National Development Plan.

## **National Constitutional, Legal and Institutional Framework**

In the national legal framework of Iran, there are many laws and regulations that deal directly or indirectly with biodiversity conservation. Some of the most important ones that are referred in this NBSAP are listed below:

- Article 50 of the Constitution of the Islamic Republic of Iran;
- National Macro- policies on Environment (Endorsed by the Supreme Leader);
- The fifth Five-Year National Development Plan;
- The sixth Five-Year National Development Plan;
- Draft Strategies of the Department of Environment in line with the sixth Five-Year National Development Plan;
- Strategies for implementing the Sustainable Development Goals (SDGs);
- Law for the Protection and Improvement of the Environment;
- Vision 2025 for Development;

### **Article 50 of the Constitution of the Islamic Republic of Iran**

Article 50 of the Constitution is the most important accredited existing legal statement concerning the protection of the environment and prevention of its pollution and degradation. The Constitution prohibits all activities, economic or otherwise, that may result in irreparable damage to the environment. The government has increasingly striven to implement these objectives by paying increasing attention to environmental issues and to biodiversity conservation.

### **The Fifth Five-Year National Development Plan**

Seven articles in the fifth National Development 'Plan (2010–2014) have been dedicated to the environmental obligations of the government. According to these articles the government should:

- Develop and implement the integrated ecosystem management programme and action plan;
- Develop and implement the program for protection and sustainable use of biodiversity in the fragile and sensitive ecosystems of the country;
- Develop the rules of procedure (bylaws) to promote public awareness and achieve sustainable development with the aim of protection of the environment;
- Develop and implement the country's environmental information system in sensitive ecosystems.

## **The Sixth Five-Year National Development Plan**

The NBSAP2 will contribute to the objectives of the 6th national development plan. This plan has been approved by ministers and is in the process of being approved in parliament. It has a single article with 35 notes. Note No. 11 has been set specifically for environmental strategies, even though some other notes are not very distant from the subject:

### **Single Article**

In line with the vision policy document, in terms of general policies of Resistance Economy and the sixth overall plan and within the context of a comprehensive, sustainable, knowledge-based, justice-based, public-based, endogenous and exogenous development approach, and in order to achieve accelerated economic growth, dynamic, stable and creative job market, strengthening competitiveness and enhancing efficiency, development of private and cooperative sector contributions, empowering of the poor and disadvantaged, improving social capital, excellence and cultural development, improving the administrative system, law obedience, transparency and accountability, the executive bodies are required to take the necessary measures to achieve the objectives of the sixth program and the implementation of the provisions of this law and related documents that are approved by the cabinet.

### **Note No. 11**

One of the strongest environmental notes in this plan is No. 11 which requires all the executive bodies and the private and cooperative sectors for major projects to have strategic environmental assessment and Environmental Impact Assessment (EIA) of policies, programs and plans based on indexes, standards and criteria for environmental sustainability. The other important point in this note relates to sustainability indexes with a responsibility of the Department of Environment for the development, approval and issuance of them.

## **The Supreme Council of Environment**

This council is the country's highest decision-making body on environmental matters. The President is the head of the council and the members are: Head of Department of Environment, Ministers of Agriculture Jihad, Industry, Mines and Commerce, Ways and Urban Development, Health and Medical Education, Head of Management and Planning Organization; and four authorities recommended by the Head of the Environment Department. The Council has the responsibility for approval and notification of policy implementation, designing a goal accomplishments mechanism, improving the structure and related processes, coordination and coherence in policies, programs and supervision of the implementation of national action plans for achieving the approved document, using the capabilities of the Department of Environment and other relevant institutions and facilities in the country. All of the institutions are obliged to implement action plans adopted by the Supreme Council of Environment.

## **National Macro-Policies on Environment (Endorsed by the Supreme Leader)**

The new environment strategies have been based on the Supreme Leader General's Environmental Policies which include a 15-point plan. These strategies contain the need to create integrated national environment management and systems, managing climate change and environment threats such as desertification, especially dust pollution and drought. These policies also call for continuous monitoring and control of sources and agents of various environmental pollutants, including adverse changes in the climate, expansion of a green economy (which stresses the need for developing low-carbon industry, using clean energy, promoting healthful and organic agricultural products and providing better waste management, development of public transportation systems using electricity and other energy sources that do not rely on fossil fuels, especially in larger cities), supporting eco-friendly investments by granting tax breaks and eliminating some fees. These policies require the authorities to strengthen environmental diplomacy, creating and strengthening regional institutions to confront pollution as well as bilateral, multilateral, regional and international partnerships and targeted cooperation in the environmental field, also the need to criminalise destruction of the environment and for penalties to deter polluters by requiring them to pay for damages, solving the issue of "land-grabbing", protecting Iran's groundwater and broader education in water use, the need for investing in scientific environmental research and for public and cultural awareness campaigns about protecting the environment and the compilation of a comprehensive atlas on the Iranian ecosystems.

Policies have been addressed to the President, Parliament and Head of Judiciary, and these serve as guidelines and initiatives for the three branches of Iran's government.

- 1- Comprehensive, harmonious and systematic vital resources management (including air, water, soil and environmental variation) based on the power and stability of the living habitat, especially through increasing legal capacities and capabilities as well as a suitable structure along with people's partnership approach;
- 2- Establishing a national integrated environment system;
- 3- Modifying environmental conditions in order to provide society with a healthy environment and observing inter-generational justice and rights;
- 4- Preventing diffusion of forbidden pollutants and considering environmental destruction as a crime and influential preventative punishment of those using polluting agents and destructors of the environment and obliging them to compensate for damages;
- 5- Progressive monitoring and control of the resources and pollutant factors in the air, water, soil, sound pollution, destructive waves and rays, unsuitable climatic changes and the necessity of observing the environmental standards and indexes in the rules and regulations, development plans and land mobilisation;
- 6- Preparing Iran's living habitat atlas and protecting, revitalising, renovating and developing recyclable natural resources (like seas, lakes, rivers, dam reservoirs,

- lagoons, underground water tables, forests, soil, pastures and ecosystem variations, especially wildlife) and legal limitations on the exploitation of these resources suitable with their ecologic power (tolerable capacity and renovation capability) as per the stability criteria and indexes, management of sensitive and valuable ecosystems (including national parks and national natural places) and protection and upgrading of genetic resources up to international standard levels;
- 7- Management of climatic changes and confronting bio-environmental threats such as desert reclamation, removal of dust especially aerosols, drought and microbe transmitters, radioactive substances, foresight development and realising newly-recognised environmental phenomena and managing them;
  - 8- Developing the green economy, focusing on:
    - 8-1- Low-carbon industry, using clean energy, healthy and organic agricultural products, waste matters and sewerage management by enjoying the advantages of economic, social, natural and environmental capacities and capabilities;
    - 8-2- Modifying the production pattern in different economic and social sectors and optimising water, food and energy consumption models especially promoting fuels friendly to the environment;
    - 8-3- Developing green and non-fossil public transportation, such as electric transportation, and making public transportation more popular particularly in the major cities;
  - 9- Balancing and keeping the quality of subsurface water through watershed management, water table management, management of reducing factors of exploitation of subsurface water and evaporation and controlling pollutants;
  - 10- Establishing an environmental auditing system in Iran, considering environmental values and costs (destruction, pollution and revitalisation) in the national accounts;
  - 11- Supporting and encouraging investments and compatible technologies within the environment by means of suitable tools such as green tax and duties;
  - 12- Compiling the environment morality charter and promoting and characterising an environmental mindset and morality based on Iranian-Islamic constructive values and patterns;
  - 13- Optimising scientific studies and research and exploiting environmental innovative technologies and domestic experiences concerning maintenance of the balance of living habitats and preventing environmental pollution and destruction;
  - 14- Developing the level of society's environmental awareness, knowledge and insight and empowering religious principles and learning social partnership, especially admonishing fellow believers to do right and to avoid sin for the protection of the environment at all society levels and groups;
  - 15- Reinforcing environmental diplomacy by:

15-1- Taking measures to make and reinforce regional organisations in order to confront dust and water pollution;

15-2- Developing the appropriateness and attracting partnership and mutual, multiple, regional, international and influential targeted cooperation concerning the environment;

15-3- Influential application of the international opportunities and incentives towards a low-carbon economy and facilitating the transfer and development of the relevant technologies and innovations.

### **Draft Strategies of the Department of Environment in Line with the Sixth Five-Year Development Plan**

The country's fifth Five-Year Development Plan has been implemented by the end of the Iranian calendar year on March 21, 2016. In the Department of Environment the high-level and intermediate officials and experts have held numerous multi-sector committees. The result is comprehensive programs and strategies at different levels. Some topic examples of this program are:

- Creating and deploying a sustainable and integrated management system for the development and implementation of the biodiversity action plan in three layers of habitats, species and genetic variation;
- A review of the Public Environment Comprehensive Training Program in cooperation with the concerned authorities which will be approved by the Cabinet;
- A strategic action plan for dealing with water crises and release of environmental water due shares for land stability and sustainability;
- A strategic action plan for creating a network of non-governmental Mechanised Automobile Inspection Centres with sufficient capacity and even reliability across the country and eliminating the problem of waste disposal and dispersal in the environment, water resources and sea level in the cities and provinces with waste;
- Requiring an environmental assessment for all of the country's major decisions (such as policies, laws, regulations and approvals) as well as all the country's major projects and programs (such as infrastructure and national development plans) which could potentially (alone or in aggregate) have a marked effect on the environment.

### **Strategies for Implementing Sustainable Development Goals (SDGs)**

In the Department of Environment, eight meetings on mainstreaming sustainable development goals (SDGs) attended by more than 130 executives and government experts from 16 ministries and 18 executive bodies were formed and subsequent

internal meetings in some of the ministries and organisations have been held to engage all sectors. Finally, with the participation of ministers and high-ranking representatives of executive bodies the main trustees of 17 sustainable development goals were designated and approved. Each of the main trustees has the responsibility for coordination and cooperation with stakeholders and various agencies and the reporting of each SDG goal. The National Sustainable Development Committee has the task of coordinating and monitoring the process of achievement for each objective of SDG.

Targets consisted of 17 items. The Iranian National Sustainable Development Committee has determined the authorities and partner organisation responsible for implementing the SDGs as detailed in Table 3.

**Table 3: Organisations responsible for implementing the SDGs at national level**

<b>Sustainable Development Goals (SDGs)</b>	<b>Responsible Organisation</b>	<b>Partner Executive Bodies</b>
1: End poverty in all its forms everywhere	Ministry of Cooperatives , Labour and Social Welfare	Ministry of Economic Affairs and Finance, Ministry of Health and Medical Education (State Welfare Organization)
2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Ministry of Agriculture Jihad	Ministry of Health and Medical Education, Ministry of Industry, Mine and Trade, Department of Environment, Iran National Standards Organization
3: Ensure healthy lives and promote well-being for all	Ministry of Health and Medical Education	Ministry of Interior, Ministry of Cooperatives, Labour and Social Welfare, Ministry of Roads and Urban Development, Department of Environment
4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Ministry of Education	Ministry of Science, Research and Technology Ministry of Culture and Islamic Guidance, Ministry of Youth Affairs and Sports Ministry of Cooperatives, Labour and Social Welfare (Technical and Vocational Training Organization) The Academy of Sciences
5: Achieve gender equality and empower all women and girls	Vice President for Women and Family Affairs	Ministry of Interior
6: Ensure access to water and sanitation for all	Ministry of Energy	Ministry of Health and Medical Education, Ministry of Agriculture Jihad, Ministry of Interior, Department of Environment



7: Ensure access to affordable, reliable, sustainable and modern energy for all	Ministry of Energy	Ministry of Petroleum, Atomic Energy Organization
8: Promote inclusive and sustainable economic growth, employment and decent work for all	Ministry of Economic Affairs and Finance	Ministry of Cooperatives, Labour and Social Welfare, Central Bank, Management and Planning Organization
9: Build resilient infrastructure, promote sustainable industrialisation and foster innovation	Ministry of Industry, Mine and Trade	Ministry of Science, Research and Technology, Ministry of Petroleum, Ministry of Information and Communications Technology, Central Bank, Vice- Presidency for Science & Technology
10: Reduce inequality within and among countries	Ministry of Economic Affairs and Finance	Ministry of Foreign Affairs, Ministry of Interior
11: Make cities inclusive, safe, resilient and sustainable	Ministry of Roads and Urban Development	Management and Planning Organization, Ministry of Energy, Ministry of Interior
12: Ensure sustainable consumption and production patterns	Management and Planning Organization (National Productivity Organization)	Ministry of Agriculture Jihad, Ministry of Petroleum, Ministry of Energy, Ministry of Industry, Mine and Trade, Department of Environment, National Standards Organization
13: Take urgent action to combat climate change and its impacts	Department of Environment	Ministry of Roads and Urban Development (Meteorological Organization), Ministry of Information and communications technology (Space Agency), Ministry of Petroleum (Members of the National Working Group on Climate Change)
14: Conserve and sustainably use the oceans, seas and marine resources	Department of Environment	Ministry of Agriculture Jihad (Fishery Organization), Ministry of Information and Communications Technology (National Institute for Oceanography & Atmospheric Science), Ministry of Roads and Urban Development (Port and Maritime Organization), Ministry of Energy

15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss	Department of Environment	Ministry of Agriculture Jihad (Forest, Rangeland and Watershed Management Organization), Management and Planning Organization
16: Promote just, peaceful and inclusive societies	Ministry of Interior	Ministry of Foreign Affairs, Ministry of Justice
17: Revitalise the global partnership for sustainable development	Management and Planning Organization	National Sustainable Development Committee

# Section 4

## NBSAP2

The vision for NBSAP2 with 4 strategic goals, 24 national targets and 99 actions lays out the aims, by 2030, to have raised awareness of the importance of biodiversity for human wellbeing and to have improved the status of biodiversity sustainably, so the natural landscapes, ecosystems, species and genetic resources, vital elements of air, water, soil, fauna and flora are effectively conserved. In such an environment, people have physical and mental health, peace and security, and sustainable socio-economic and environmental justice.

## **NBSAP2**

In line with the CBD's Strategic Plan for Biodiversity 2011–2020 and Target 17 of the Aichi Biodiversity Targets, there is a requirement for parties to the Convention to update and revise their NBSAPs. The Islamic Republic of Iran initiated the process of revising and updating the 2006 version of its NBSAP which has been approved by the High Council of the Environment. A steering committee was established with representatives from relevant bodies. Under supervision of this steering committee, a drafting group was appointed to revise the NBSAP. A draft has been sent to several stakeholders in national and provincial levels to seek their comments and views. Some workshops and meetings were conducted accordingly.

### **Vision:**

By 2030, public awareness, raised on the importance of biodiversity for human wellbeing, and status of biodiversity improved sustainably, so the natural landscapes, ecosystems, species and genetic resources, vital elements of air, water, soil, fauna and flora are effectively conserved. In such an environment, people have physical and mental health, peace and security, and sustainable socio-economic and environmental justice.

### **Goal:**

By the end of the sixth National Development Plan (2021), Iran (the government and society), based on the awareness of the importance of biodiversity in human wellbeing, will participate in the conservation and restoration of different levels of biodiversity in such a way that sustainable development based on sound environmental processes will be met.

### **Mission:**

- 1- To implement Article 50 of the Constitution of the Islamic Republic of Iran
- 2- To achieve the national strategies set out in the NBSAP2
- 3- To achieve Aichi Targets, Sustainable Development Goals

The current version which is a consolidated document follows previous strategies, although its goals are developed based on the current situations and needs not only within the country, such as the National Macro-Policies on Environment (Endorsed by the Supreme Leader) and the draft of the sixth National Development Plan (2016–2010), but also on international approaches including Aichi Targets and SDGs.

**Table 4: Relationships between national and international policies with NBSAP2**

		<b>Strategic Goal 1</b>	<b>Strategic Goal 2</b>	<b>Strategic Goal 3</b>	<b>Strategic Goal 4</b>
1	<b>NBSAP2</b>	Mainstreaming biodiversity across government and society and promoting awareness and public participation to achieve sustainable development goals	Integrated biodiversity monitoring, assessment and reporting	Reducing pressures on biodiversity and promoting sustainable use of natural resources	Integrated conservation of biodiversity
2	<b>NBSAP 1</b>	Promotion of public awareness and participation	Formation of biodiversity information systems	Sustainable use of biodiversity resources	Integrated conservation of biodiversity
3	<b>Aichi Strategic Goals</b>	√	√	√	√
4	<b>SDG</b>	√	√	√	√
5	<b>National Macro- Policies on Environment (Endorsed by the Supreme Leader)</b>	√	√	√	√
6	<b>Draft of the Sixth National Development Plan</b>	√	√	√	√

## **Strategic Goal of NBSAP2**

- 1. Mainstreaming biodiversity across government and society and promoting awareness and public participation to achieve sustainable development goals;**
- 2. Integrated biodiversity monitoring, assessment and reporting;**
- 3. Reducing pressures on biodiversity and promoting sustainable use of natural resources;**
- 4. Integrated conservation of biodiversity.**

## National Targets

Based on these 4 strategies, 24 main national targets can be outlined:

### Strategic Goal 1: Mainstreaming biodiversity across government and society and promoting awareness and public participation to achieve sustainable development goals

**National Target 1:** By 2020, national strategy for formal and informal education systems in biodiversity conservation concepts, values and practices is developed and implemented.

**National Target 2:** By 2020, knowledge and awareness of specialists and experts for effective management of biodiversity are enhanced.

**National Target 3:** By 2025, all stakeholders are appropriately engaged in conservation of biodiversity, with the effective participation of local communities.

**National Target 4:** By 2025, biodiversity considerations have been mainstreamed into national and local development policies, legislation, strategies and practices.

**National Target 5:** By 2025, biodiversity values have been integrated into national and local planning, development processes, poverty reduction strategies and accounts.

### Strategic Goal 2: Integrated biodiversity monitoring, assessment and reporting

**National Target 6:** By 2025, biodiversity-related research and related information infrastructures are strengthened.

**National Target 7:** By 2025, an integrated national biodiversity monitoring, assessment and reporting system is established.

**National Target 8:** Strengthening of national legal, regulatory and institutional frameworks and jurisdictional procedures for the conservation of biodiversity.

### Strategic Goal 3: Reducing pressures on biodiversity and promoting sustainable use of natural resources

**National Target 9:** By 2030, the rate of loss of natural habitats, in particular forests, wetlands, mountains and dry lands is at least halved, and degradation and fragmentation is significantly reduced.

**National Target 10:** By 2025, pollution, in particular marine pollution, including marine debris and nutrient pollution is significantly reduced.

**National Target 11:** By 2020, the introduction of invasive alien species is controlled and, by 2025, the impact of invasive alien species on land and water ecosystems is significantly reduced.

**National Target 12:** By 2020, policies and regulations for biosafety are compiled and an effectively implemented mechanism is in place.

**National Target 13:** By 2020, effective measures to reduce the impact of climate change on biodiversity are developed and, by 2018, an appropriate mechanism is in place.

**National Target 14:** By 2030, effective measures for sustainable use of biodiversity resources are developed and implemented.

**National Target 15:** By 2025, good governance for conservation and sustainable use of biodiversity are promoted.

#### **Strategic Goal 4: Integrated conservation of biodiversity**

**National Target 16:** By 2025, preservation, restoration and sustainable use of terrestrial and inland water ecosystems are ensured.

**National Target 17:** By 2030, marine and coastal ecosystems are sustainably managed and protected.

**National Target 18:** By 2030, conservation and wise use of wetlands are strengthened and the situation for at least 50% of degraded wetlands is improved.

**National Target 19:** By 2030, at least 20% of terrestrial and inland water ecosystems, and 5% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are protected.

**National Target 20:** By 2025, sustainable forest management plans are developed and implemented across the forest zone of Iran, the rate of deforestation significantly reduced and at least 20% of degraded forests are rehabilitated.

**National Target 21:** By 2025, sustainable rangeland management is developed and implemented.

**National Target 22:** By 2025, threatened species, with particular attention to endemic species, are identified and assessed and, by 2030, effective conservation plans are under implementation.

**National Target 23:** By 2030, financial resources from all sources to conserve and sustainably use of biodiversity are mobilised and significantly increased.

**National Target 24:** By 2025, environmental diplomacy, bilateral and multilateral cooperation in the context of biodiversity at regional and international levels are promoted.



## **Strategic Goal 1: Mainstreaming biodiversity across government and society and promoting awareness and public participation to achieve sustainable development goals**

Although over the past 15 years, the government has increasingly striven to act on Article 50 of the Constitution which is the most important accredited existing legal statement concerning the protection of the environment and biodiversity conservation, still biodiversity objectives remain weak within the activities of government agencies, business sectors and community, within the country. This means that development and land use that mostly lies in development zones or outside protected areas (eg tourism, mining, agriculture, forestry, fisheries) continues to undermine biodiversity, often through habitat conversion and fragmentation. Therefore, it is necessary to plan in order to maintain the essential services that it provides and this requires immediate action and the collective engagement of all parts of society, governmental agencies, non-governmental organisations and the private sector alike.

Within this strategic goal, biodiversity mainstreaming, awareness raising and public participation have been planned together, because public awareness can lead to increased participation of people in biodiversity conservation and can support its mainstreaming within government and society. The public participation itself can enhance awareness among the public. Some of the actions implemented under this strategy are laid out below:

1. Developing a national strategy/policy for environmental education that encourages and enables society and government to actively become involved in biodiversity conservation and other related efforts;
2. Including biodiversity topics in national educational programs and school books;
3. Organising annual biodiversity related festivals, exhibitions and competitions (eg Green Film Festival, IDB festival, Clean Air Day, Green Industry Award);
4. Cooperation with media for production of awareness raising and promotional materials;
5. Review and update the Public Environment Comprehensive Training Program (PECTP) in collaboration with relevant stakeholders;
6. Training courses to be conducted for experts and technical staff of relevant authorities;
7. Training course to be conducted for high level decision making including line ministries, judiciary and parliamentarians;
8. Promoting the concept of “Healthy Nature Healthy People” to increase public awareness of the value of nature for health and wellbeing;

9. Facilitating the establishment and empowerment of community based organisations to increase their role in the conservation of biodiversity and improving national environmental conditions;
10. Supporting the network of environmental NGOs to become stronger and more technical;
11. Integrating biodiversity considerations into development and implementation of policy, legislative and governance tools;
12. Incorporating biodiversity aspects and consideration of ecological functions in the development and implementation of spatial planning and planning instruments at all levels;
13. Strengthening cross-sectoral and sectoral structures, by considering and accounting for the current natural resources and environmental conditions (DOE and MoJA may propose to the Cabinet);
14. Appropriate allocation of resources in key sectors, to facilitate effective conservation of biodiversity;
15. Establishment of national environmental auditing mechanism, considering ecosystem services, costs and values;
16. Preparing guidelines to evaluate economic losses resulting from the implementation of development projects in protected areas of Iran;
17. Preparation of database on management and updating the economic value of natural ecosystems within PAs;
18. Feasibility study and establishment of the national framework for the use of the PES mechanism in the conservation of biodiversity;
19. Developing principles and regulations related to business development based on the sustainable use of the biodiversity resources.

## **Strategic Goal 2: Integrated biodiversity monitoring, assessment and reporting**

The lack of a long-term monitoring system for the natural environment, threatens the biodiversity of Iran. The lack of a systematic evaluation and monitoring system for protected areas and sensitive ecosystems, on the one hand, is caused by a lack of detailed knowledge about the existing status of the country's biodiversity situation and, on the other hand, by some inadequate decisions of managers which have accrued. So determining and evaluating the ecological integrity and socio-economic indices for protected areas and sensitive habitats are essential for biodiversity conservation.

Formation of a biodiversity information system is a crucial step towards establishing an information sharing mechanism between various biodiversity stakeholders. Biodiversity research is necessary for enhancing technical capacity for developing and implementing biodiversity conservation plans. Conducting research programs and monitoring systems for biodiversity conservation requires facilities such as research institutes and laboratories. In addition, collection of information related to protected areas, animal and plant species is necessary for planning and decision making for the effective management of these areas, fauna and flora.

Many effective actions have been carried out during the implementation of NBSAP1, but there are still lots of gap and needs to keep this strategy as one of the main strategic goals.

The actions under this strategy include:

20. Updating the Environmental Information System at national, regional and provincial levels. The bylaw will be prepared by the Department of Environment in cooperation with relevant organisations and should be approved by the Cabinet;
21. Revitalising the CHM website ([www.CHM.ir](http://www.CHM.ir));
22. Improving biodiversity laboratories;
23. Considering religious principles as well as social and traditional knowledge for conservation and the sustainable use of biodiversity especially admonishing fellow believers to do right and avoid sin for the protection of the environment in all society levels and groups;
24. Developing and implementing a comprehensive monitoring system in protected areas of Iran to improve the effectiveness of conservation of biodiversity according to international standards;
25. Developing an intelligent monitoring system for long-term control of biodiversity;
26. Allocation of specific budget line to develop and implement conservation plans and intelligent monitoring system of PAs;
27. Preparation of monitoring and assessment summary report for country level decision makers, annually;

28. Developing biodiversity indexes and considering them in biodiversity related activities;
29. Reviewing and updating biodiversity related rules and policies;
30. Developing a legal basis for greater involvement of local communities, private sector and other partners in biodiversity conservation and sustainable use management programmes.

### **Strategic Goal 3: Reducing pressures on biodiversity and promoting sustainable use of natural resources**

This strategy and the national targets followed covers activities that have a considerable impact on biodiversity. The major causes of biodiversity decline are land use changes, habitat degradation and fragmentation, pollution, climate change and the introduction of alien species, all coincident with human population growth.

One important point about the implementation of this strategy is that integrating biodiversity concerns in development plans, development of a framework for utilisation of biodiversity resources and monitoring this utilisation are the main aims of a sustainable development approach. Also study and development of policies for fair distribution of biodiversity related benefits among local communities is a factor.

Other important factors under this strategy include review and improvement of environmental laws and regulations especially development of national laws related to biosafety and ecotourism. Since economic motive is one of the main reasons for unsustainable utilisation of biodiversity resources, identifying and demonstrating different aspects of the economic values of these resources is very important.

Some of the actions conducted under this strategy are listed below:

31. Updating criteria for utilisation of biodiversity resources and ecosystem services;
32. Reviewing and updating national biodiversity indicators;
33. Encouraging native species for rehabilitation of forests and rangelands;
34. Promoting sustainable agricultural approaches;
35. Developing and implementing an integrated plan for agro-biodiversity;
36. Develop and implement a national plan for safeguarding coastal and marine environment,
37. Review of current situation, gap analysis and management planning for marine threatened species
38. Mapping vulnerable and critical marine species
39. Strengthening regional collaborations for conservation, restoration and pollution control in marine and coastal zones with special emphasis on island ecosystems.
40. Replacement of destructive fishing with suitable methods with focus on endemic species.
41. Balance and protection of underground water quality through watershed management practices, aquifer management, utilisation management, factors that decrease evaporation of groundwater and control of pollution.
42. Restoration of endemic species and prevention of the introduction, growth and spread of invasive species;
43. Studying the impacts of invasive alien species on land and water ecosystems;

44. Establishing a mechanism for developing adequate standards for the control of productions, import and consumption of GMOs;
45. Developing a national biosafety legal framework and policies related to adverse effects of GMOs and LMOs;
46. Capacity building to prevent GMOs and to develop sustainable agriculture adapted to local conditions;
47. Developing a comprehensive plan for emerging environmental emerging issues (eg impact of climate change, phenomenon of dust storms, drought and water shortages, wetland destruction, forest fires, wildlife disease, etc);
48. Promoting mechanisms for awareness raising and capacity building amongst relevant authorities and other stakeholders for effective biodiversity and climate change-related planning;
49. Consideration of Paris agreements on climate change adaptation and biodiversity conservation;
50. Integrating biodiversity into the Fisheries' management system;
51. Developing and implementing a comprehensive Eco-tourism management plan;
52. Developing sustainability indicators and a plan for their application in biodiversity related activities.
53. Promoting accountability and transparency in decision making related to biodiversity conservation and governance of natural resources;
54. Appropriate recognition of traditional knowledge in conservation and management of natural resources.

## **Strategic Goal 4: Integrated conservation of biodiversity**

Conservation of biodiversity only happens when all stakeholders are involved. Integrated management of biodiversity resources requires that all organisations, research centres, universities, etc work together under a systematic framework.

The process of globalisation has increased the importance of international diplomacy and policy making and implementation in a wide range of universal and regional organisations, as well as between states and especially in a bilateral and multilateral context. To achieve these approaches, in the process of updating NBSAP1, this strategy has been added to the four existing strategies.

The main targets of this strategy are focused on bilateral, multilateral, regional and international cooperation for capacity building and experience sharing on biodiversity conservation policies and practices. In this regard efforts to create and strengthen regional institutions to deal with dust and water pollution, enhance regional and international cooperation to combat poaching and trafficking of protected species, effective use of international opportunities and incentives to move towards a low carbon economy and facilitate the transfer and development of related technologies and innovations are all considered.

In order to make integrated management work effectively, different actions have been planned:

55. Reconsidering management plans of the areas under overuse, misuse and over-exploitation of natural resources in accordance with the carrying capacity;
56. Developing, fundraising and implementing national project and provincial plans for conservation of vulnerable and critical ecosystems; (eg Cheetah, Zagros and Wetlands projects);
57. Revitalising the Biodiversity Committee under the National Commission on Sustainable Development with the membership of relevant governmental and nongovernmental organisations;
58. Integrated management of coastal zone in the north and south of Iran, including Identification of the coastal area buffer zones and determining the legal and authorised activities in the coastal area buffer zones.
59. Updating and implementing the national comprehensive management plan for marine ecosystems;
60. Developing the national plan for integrated management of islands in the Persian Gulf;
61. Developing a systematic approach, including methods, techniques and expertise, for mapping and prioritising ecological restoration of wetlands;
62. Improving the effective management of inland waters with emphasis on wetlands and rivers;

63. Decreasing the number of Iranian wetlands listed under the Montreux Record;
64. Promoting sustainable use of wetland's goods and services by raising awareness and updating legislation and policies;
65. Developing and implementing a comprehensive management plan for wetlands with international importance recorded in the Ramsar Convention;
66. Strengthening legal structures and mobilisation of financial resources in protected areas;
67. Identifying necessary wildlife corridors to facilitate migration within and between protected areas;
68. Updating the comprehensive management plans for protected areas;
69. Increasing protected areas from 10.3% in 2016 of the country's area to 20 % in 2030;
70. Reducing the utilisation of primary forests up to 30% per year, leading to a halt in primary forest use in the fourth year of the sixth National Development Program;
71. Rehabilitation of degraded forest by 15% using the endemic and native species, the quality indexes for all forest zones, including the Hyrcanian and Zagros forests;
72. A halt to industrial exploitation of primary forest and increase in development of timber plantations from 900,000 ha to 2.9 million;
73. Exclusion of Customs duties for timber imports and development of facilities to import non-processed wood;
74. A halt to any type of construction within primary forests;
75. An inventory of forest resources to be carried out every 5 years;
76. Improving watershed management practices up to eight million hectares by the end of the sixth NDP;
77. Ensuring local communities directly and sustainably see the benefit from forest productions, including ecotourism;
78. Moving livestock out of forests, based on the forests' carrying capacity;
79. Mobilising significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to advance such management, including for conservation and reforestation;
80. Ensuring that, by 2025, all natural forests are under the SFM according to the known criteria and indicators and multi-purpose dimensions;



81. Identification and mapping out of rangeland reserves and endangered species by 2025;
82. Completing rangeland livestock-balance by 2025;
83. Providing alternative livelihood for rangers to reduce number of livestock;
84. Strengthening ranger unite structures;
85. Identification and protection of endangered desert fauna and flora;
86. Identifying and addressing the sand and dust storm hotspots in Iran and neighbouring countries to control and reduce their affect;
87. Developing and implementing management plans and sustainable funds for conservation of threatened and endangered species;
88. Ensuring sufficient *ex situ* conservation of threatened species to address the impacts of climate change, habitat fragmentation and unsustainable use;
89. Developing and strengthening economic incentives to encourage appropriate investment by the private sector in biodiversity management and conservation (eg green tax incentives);
90. Allocation by governmental and public organisations of appropriate budgets on research for biodiversity related topics;
91. Consideration by the national finance sector of green taxes and accounting as one of the pillars of the national tax system; The proceeds of this will be paid to the National Environmental Fund to be spent on decontamination and rehabilitation of the environment;
92. Strengthening bilateral and multilateral cooperation and promoting scientific and practically-based joint collaborations;
93. Establishment of trans-boundary conservation areas (eg Biosphere Reserves, Peace Parks and Protected Areas) with neighbouring countries;
94. Increasing technical expertise in the field of international environmental cooperation;
95. Strengthening the regional centres hosted by Iran, in particular, the Ramsar Regional Centre in West and Central Asia and the Institute of Environmental Science and Technology of the Economic Cooperation Organisation (ECO-IEST);
96. Making efforts to create and strengthen regional institutions to combat sand and dust storm and water pollution;
97. Increasing collaboration with international institutions and biodiversity conservation instruments (eg CBD, CITES, Ramsar, UNESCO-MAB, UNCCD, IUCN, IPBES);

98. Enhancing regional and international cooperation to combat poaching and trafficking of fauna and flora;
99. Considering the 2030 Agenda for Sustainable Development (SDGs) in national development programmes.

## Annex: NBSAP2 strategic goals, national targets and action plan

Strategic Goals	National Targets	Action Plan
<b>Strategic Goal 1:</b>  <b>Mainstreaming biodiversity across government and society and promoting awareness and public participation to achieve sustainable development goals</b>	<b>National Target 1:</b> By 2020, National Strategy for formal and informal education system in biodiversity conservation concepts, values and practices is developed and implemented.	<ol style="list-style-type: none"> <li>1. Developing a national strategy/policy for environmental education that encourages and enables society and government to actively become involved in biodiversity conservation and other related efforts.</li> <li>2. Including biodiversity topics in national educational programs and school books.</li> <li>3. Organising annual biodiversity related festivals, exhibitions and competitions (e. Green Film Festival, IDB festival, Clean Air Day, Green Industry Award).</li> <li>4. Cooperation with media for production of awareness raising and promotional materials.</li> </ol>
	<b>National Target 2:</b> By 2020, knowledge and awareness of specialists and experts for effective management of biodiversity are enhanced.	<ol style="list-style-type: none"> <li>5. Review and update the Public Environment Comprehensive Training Program (PECTP) in collaboration with relevant stakeholders.</li> <li>6. Training courses will be conducted for experts and technical staff of relevant authorities.</li> <li>7. Training course will be conducted for high level decision making including line ministries, judiciary and parliamentarians.</li> </ol>
	<b>National Target 3:</b> By 2025, all stakeholders are appropriately engaged in conservation of biodiversity, with the effective participation of local communities.	<ol style="list-style-type: none"> <li>8. Promoting the concept of “Healthy Nature, Healthy People” to increase public awareness of the value of nature for their health and wellbeing.</li> <li>9. Facilitating the establishment and empowerment of community based organisations to increase their role in conservation of biodiversity and improving national environmental conditions.</li> <li>10. Supporting the network of environmental NGOs to become stronger and more technical.</li> </ol>
	<b>National Target 4:</b> By 2025, biodiversity considerations have been mainstreamed into national and local development policies, legislations, strategies and practices.	<ol style="list-style-type: none"> <li>11. Integrating biodiversity considerations into development and implementation of policy, legislative and governance tools.</li> <li>12. Incorporating biodiversity aspects and consideration of ecological functions in the development and implementation of spatial planning and planning instruments at all levels of planning.</li> <li>13. Strengthening cross-sectoral and sectoral structures, by considering and accounting for the current natural resources and environmental conditions (DoE and MoAJ may propose to the Cabinet).</li> <li>14. Appropriate allocation of resources in key sectors, to</li> </ol>

		facilitate effective conservation of biodiversity.
	<b>National Target 5:</b> By 2025, biodiversity values have been integrated into national and local planning, development processes, poverty reduction strategies and accounts.	<p>15. Establishment of national environmental auditing mechanism, considering ecosystem services, costs and values.</p> <p>16. Preparing guidelines to evaluate economic losses resulting from the implementation of development projects in protected areas of Iran.</p> <p>17. Preparation of database on management and updating the economic value of natural ecosystems within PAs.</p> <p>18. Feasibility study and establishment of the national framework for the use of the PES mechanism in the conservation of biodiversity.</p> <p>19. Developing principles and regulations related to business development based on the sustainable use of the biodiversity resources.</p>
<b>Strategic Goal 2: Integrated biodiversity monitoring, assessment and reporting</b>	<b>National Target 6:</b> By 2025, biodiversity related research and information related infrastructures are strengthened.	<p>20. Updating the environmental Information System at the national, regional and provincial levels.</p> <p>21. Revitalising the CHM website (<a href="http://www.CHM.ir">www.CHM.ir</a>).</p> <p>22. Improving biodiversity laboratories.</p> <p>23. Considering religious principles as well as social and traditional knowledge for conservation and sustainable use of biodiversity especially admonishing fellow believers to do right and avoid sin for the protection of the environment in all society levels and groups.</p>
	<b>National Target 7:</b> By 2025, an integrated national biodiversity monitoring, assessment and reporting system is established.	<p>24. Developing and implementing a comprehensive monitoring system in protected areas of Iran to improve the effectiveness of conservation of biodiversity according to international standards.</p> <p>25. Developing intelligent monitoring system for long-term control of biodiversity.</p> <p>26. Allocation of specific budget line to develop and implement conservation plans and intelligent monitoring system of PAs.</p> <p>27. Preparation of monitoring and assessment summary report for country level decision makers, annually.</p> <p>28. Developing biodiversity indexes and their consideration in biodiversity related activities.</p>
	<b>National Target 8:</b> Strengthening of national legal, regulatory and institutional frameworks and	<p>29. Reviewing and updating biodiversity related rules and policies.</p> <p>30. Developing legal basis for greater involvement of local</p>

	jurisdictional procedures for the conservation of biodiversity.	communities, private sector and other partners in biodiversity conservation and sustainable use management programmes.
<b>Strategic Goal 3:</b>  <b>Reducing pressures on biodiversity and promoting sustainable use of natural resources</b>	<b>National Target 9:</b> By 2030, the rate of loss of natural habitats, in particular forests, wetlands, mountains and dry lands is at least halved, and degradation and fragmentation is significantly reduced.	31. Updating criteria for utilisation of biodiversity resources and ecosystem services. 32. Reviewing and updating national biodiversity indicators. 33. Encouraging native species for rehabilitation of forests and rangelands. 34. Promoting sustainable agricultural approaches. 35. Developing and implementing an integrated plan for agro-biodiversity.
	<b>National Target 10:</b> By 2025, pollution, in particular marine pollution, including marine debris and nutrient pollution is significantly reduced.	36. Develop and implement a national plan for safeguarding coastal and marine environment, 37. Review of current situation, gap analysis and management planning for marine threatened species 38. Mapping vulnerable and critical marine species 39. Strengthening regional collaborations for conservation, restoration and pollution control in marine and coastal zones with special emphasis on island ecosystems. 40. Replacement of destructive fishing with suitable methods with focus on endemic species. 41. Balance and protection of underground water quality through watershed management practices, aquifer management, utilisation management, factors that decrease evaporation of groundwater and control of pollution.
	<b>National Target 11:</b> By 2020, the introduction of invasive alien species is controlled and, by 2025, the impact of invasive alien species on land and water ecosystems is significantly reduced.	42. Restoration of endemic species and prevention of the introduction, growth and spread of invasive species. 43. Studying the impacts of the invasive alien species on land and water ecosystems.
	<b>National Target 12:</b> By 2020, policies and regulations for biosafety are compiled and an effectively implemented mechanism is in place.	44. Establishment by the government of a mechanism to develop adequate standards for the control of productions, import and consumption of GMOs. 45. Developing national biosafety legal framework and policies related to adverse effects of GMOs and LMOs. 46. Capacity building to prevent GMOs and to develop

		sustainable agriculture adapted to the local conditions.
	<b>National Target 13:</b> By 2020, effective measures to reduce climate change impact on biodiversity are developed and by 2018, an appropriate mechanism is in place.	<p>47. Developing a comprehensive plan for emerging environmental issues (eg impact of climate change, phenomenon of dust storms, drought and water shortages, wetland destruction, forest fires, wildlife disease, etc).</p> <p>48. Promoting mechanisms for awareness raising and capacity building within relevant authorities and other stakeholders for effective biodiversity and climate change-related planning.</p> <p>49. Consideration of Paris agreements on climate change adaptation and biodiversity conservation.</p>
	<b>National Target 14:</b> By 2030, effective measures for sustainable use of biodiversity resources are developed and implemented.	<p>50. Integrating biodiversity into Fisheries management system.</p> <p>51. Developing and implementing a comprehensive eco-tourism management plan.</p> <p>52. Developing sustainability indicators and their application plan in biodiversity related activities.</p>
	<b>National Target 15:</b> By 2025, good governance for conservation and sustainable use of biodiversity is promoted.	<p>53. Promoting accountability and transparency in decision making related to biodiversity conservation and governance of natural resources.</p> <p>54. Appropriate recognition of traditional knowledge in conservation and management of natural resources.</p>
<b>Strategic Goal 4: Integrated conservation of biodiversity</b>	<b>National Target 16:</b> By 2025, preservation, restoration and sustainable use of terrestrial and inland water ecosystems are ensured.	<p>55. Reconsidering management plans of the areas under overuse, misuse and over-exploitation of natural resources in accordance with the carrying capacity.</p> <p>56. Developing, fundraising and implementing national project and provincial plans for conservation of vulnerable and critical ecosystems; (eg Cheetah, Zagros and Wetlands projects);</p> <p>57. Revitalising the Biodiversity Committee under the National Commission on Sustainable Development with the membership of relevant governmental and nongovernmental organisations.</p>
	<b>National Target 17:</b> By 2030, marine and coastal ecosystems are sustainably managed and protected.	<p>58. Integrated management of coastal zones in the north and south of Iran, including identification of the coastal area buffer zones and determination of the legal and authorised activities in the coastal area buffer zones.</p> <p>59. Updating and implementing the national comprehensive management plan for marine ecosystems.</p> <p>60. Developing the national plan for integrated</p>

		management of islands in the Persian Gulf.
	<b>National Target 18:</b> By 2030, conservation and wise use of wetlands is strengthened and the situation of at least 50% of degraded wetlands are improved.	<p>61. Developing a systematic approach, including methods, techniques and expertise, for mapping and prioritising ecological restoration of wetlands.</p> <p>62. Improving the effective management of inland waters with emphasis on wetlands and rivers.</p> <p>63. Decreasing the number of Iranian wetlands listed under the Montreux Record.</p> <p>64. Promoting the sustainable use of wetland goods and services by awareness raising and updating of legislation and policies.</p> <p>65. Developing and implementing a comprehensive management plan for wetlands with international importance recorded in the Ramsar Convention.</p>
	<b>National Target 19:</b> By 2030, at least 20% of terrestrial and inland water ecosystems, and 5% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are protected.	<p>66. Strengthening legal structures and mobilisation of financial resources in protected areas.</p> <p>67. Identifying necessary wildlife corridors to facilitate their migration within and between protected areas.</p> <p>68. Updating the protected areas' comprehensive management plans.</p> <p>69. Increasing protected areas from 10.3% in 2016 of the country's area to 20% in 2030.</p>
	<b>National Target 20:</b> By 2025, sustainable forest management plans are developed and implemented across forest zones in Iran, the rate of deforestation is significantly reduced and at least 20% of degraded forests are rehabilitated.	<p>70. Reducing the utilisation of primary forests up to 30% per year, leading to a halt primary forest use in the fourth year of the 6th National Development Program.</p> <p>71. Rehabilitation by 15% of degraded forest using endemic and native species, the quality indexes of all forest zones, including the Hyrcanian and Zagros forests.</p> <p>72. A halt to industrial exploitation of primary forest and an increase in development of timber plantations from 900,000 ha to 2.9 million.</p> <p>73. Exclusion of Customs duties for timber imports and development of facilities for importing non-processed wood.</p> <p>74. A halt to any type of construction within primary forests.</p> <p>75. An inventory of forest resources to be carried out every 5 years.</p>

		<p>76. Improving watershed management practices by up to eight million hectares by the end of the sixth NDP</p> <p>77. Ensuring that local Communities directly and sustainably benefit from forest productions, including eco-tourism.</p> <p>78. Moving livestock out of forests, based on forests' carrying capacity.</p> <p>79. Mobilising significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to advance such management, including for conservation and reforestation.</p> <p>80. By 2025, ensuring that all natural forest is under the SFM according to the known criteria and indicators and multi-purpose dimensions.</p>
	<p><b>National Target 21:</b> By 2025, sustainable rangeland management is developed and implemented</p>	<p>81. Identification and mapping out of rangeland reserves and endangered species by 2025.</p> <p>82. Completion of a rangeland livestock-balance by 2025.</p> <p>83. Providing alternative livelihood for rangers to reduce number of livestock;</p> <p>84. Strengthening ranger unite structures;</p> <p>85. Identification and protection of endangered desert fauna and flora.</p> <p>86. Identifying and addressing the sand and dust storm hotspots in Iran and neighbouring countries to control and reduce their affect;</p>
	<p><b>National Target 22:</b> By 2025, threatened species with particular attention to endemic species are identified and assessed and, by 2030, effective conservation plans are under implementation.</p>	<p>87. Developing and implementing management plans and sustainable funding for conservation of threatened and endangered species.</p> <p>88. Ensuring sufficient ex situ conservation of threatened species to address the impacts of climate change, habitat fragmentation and unsustainable use.</p>
	<p><b>National Target 23:</b> By 2030, financial resources from all sources to conserve and sustainably use of biodiversity are mobilised and significantly increased.</p>	<p>89. Developing and strengthening economic incentives to encourage appropriate investment by the private sector in biodiversity management and conservation (eg green tax incentives).</p> <p>90. Allocation by governmental and public organisations of appropriate budgets on research for biodiversity related topics.</p> <p>91. Consideration by national finance sector of green taxes</p>



		<p>and accounting as one of the pillars of the national tax system. The proceeds of this shall be paid to the National Environmental Fund to be spent on decontamination and rehabilitation of the environment.</p>
	<p><b>National Target 24:</b> By 2025, environmental diplomacy, bilateral and multilateral cooperation in the context of biodiversity at regional and international levels is promoted.</p>	<p>92. Strengthening bilateral and multilateral cooperation and promoting scientific and practical- based joint collaborations.</p> <p>93. Establishment of trans-boundary conservation areas (eg Biosphere Reserves, Peace Parks, world heritage sites and Protected Areas) with neighbouring countries.</p> <p>94. Increasing technical expertise in the field of international environmental cooperation.</p> <p>95. Strengthening the regional centres hosted by Iran in particular the Ramsar Regional Centre in West and Central Asia and the Institute of Environmental Science and Technology of the Economic Cooperation Organisation (ECO-IEST).</p> <p>96. Making efforts to create and strengthen regional institutions to combat sand and dust storm and water pollution;</p> <p>97. Increasing collaboration with international institutions and biodiversity conservation instruments (eg CBD, CITES, Ramsar, UNESCO-MAB, UNCCD, IUCN, IPBES).</p> <p>98. Enhancing regional and international cooperation to combat poaching and trafficking of fauna and flora.</p> <p>99. Consideration of the 2030 Agenda for Sustainable Development (SDGs) in national development programmes.</p>

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