

Department of Environment

**SIXTH 6TH NATIONAL REPORT CYPRUS
CONVENTION ON BIOLOGICAL DIVERSITY**

Contents

INTRODUCTION.....	3
COUNTRY PROFILE.....	3
Section I. Information on the targets being pursued at the national level	5
Section II. Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets	26
Section III. Assessment of progress towards each national target.....	28
Section V. Description of the national contribution to the achievement of the targets of the Global Strategy for Plant Conservation (completion of this section is optional).....	35
Section VI. Additional information on the contribution of indigenous peoples and local communities (completion of this section is optional).....	36

INTRODUCTION

The 6th National Report provides an overall of the state of nature and the actions taken to implement EU Biodiversity Strategic Goals and Aichi Biodiversity Targets in order enhance biodiversity conservation and protection in Cyprus. Section I provides an overview of each of the EU Biodiversity Strategic Goals and the 13 Objectives of Cyprus National Biodiversity Action Plan (NBSAP). This section describes the context to the EU strategic Goals and Objectives and the link with the Global Aichi Targets of the CBD. In section II there is a description of the implementation measures undertaken to achieve the Targets of the NBSAP and their effectiveness. Section III discusses the performance of these measures against each Target of the NBSAP. This is followed in Section IV by an assessment of the contribution to achieving the Aichi Targets and links with the UN Sustainable Development Goals are provided. In Section V, progress with Targets under the Global Strategy for Plant Conservation are documented.

COUNTRY PROFILE

Cyprus has rich biodiversity, diverse ecosystems and wildlife in both terrestrial and marine environments and is characterized as a biodiversity hotspot. Its insular character, the varied climate, geology and topography along with the long history of human activities dating back to 8200 AD, have shaped the landscape and created a wide variety of natural, semi-natural and anthropogenic habitats where a large number of plant and animal species prosper. In Cyprus, as in the rest of Europe, agriculture dominates much of the landscape, extending over half of the island's territory and comprises mainly of irrigated and dry crops. Small agricultural fields with a diversity of arable land and tree crops, such as the traditional olive groves, carob trees and vineyards, create a mosaic of landscapes, ideal for many wildlife species, particularly birds and reptiles. Much of this agricultural land consists of areas farmed in a traditional (non-intensive) way. Very often agricultural land, especially on mountains, alternates with fallow or abandoned land, colonized by shrubby or phrygana, which further diversifies habitat conditions.

Natural habitats have evolved over the years and support important populations of mammals, invertebrates, birds, fish, plants and fungi. Natural vegetation is made up primarily of extensive, natural pine forests, evergreen, sclerophyllous shrubs (maquis) and phrygana, while other vegetation types occupying more specialized habitats, like riverine vegetation along streams, hasmophytes on cliffs, hygrophilous vegetation in water flooded sites etc. In total, 48 habitat types of Annex I of the Habitats Directive are known to exist on the island providing refuge to a large number of endemic, rare and otherwise important species.

The most recent reports refer to the status of biodiversity are the Reporting of Art. 17 of the Habitats Directive (HD), and Art. 12 of the Bird Directive (BD) to the EU on the state of the Natura 2000 areas for the last 6 years (2012-2018). Reporting under Article 17 of the Habitats Directive shows that 44.76% of the habitats are not in

favorable condition (unfavorable inadequate and unfavorable bad), and 24% of the species are not in favorable condition (unfavorable inadequate and unfavorable bad). Habitats that are not in favorable condition are the coastal, dunes and freshwater habitats, and species are reptiles and mammals (mainly bats) and very few plant species.

Main pressures and threats for both habitats and species are the development and construction (land use change) and infrastructure as well as agriculture. Pressures and threats such as land use change, touristic construction development, road expansion, are considered to be high for Cyprus biodiversity.

Reports on the status of species and habitats types covered by the Birds and Habitats Directives, was based on the on-going monitoring. Additionally there are reports of the CBD Protocols (Kuala Lumpur and Nagoya), the ecological status of water bodies under water framework directive (WFD), and reports for marine environment, as well as reports from BirdLife Cyprus, which collects data on populations of birds in Cyprus.

The EU Biodiversity Strategy, is the European aid to meet the UN global targets on biodiversity, aiming to combat biodiversity loss by 2020, and sets six targets towards achieving this goal. Cyprus developed a study Biodiversity Strategy in 2012 in order to implement the UN Strategic Plan for Biodiversity taking into consideration the EU Biodiversity Strategy. The National Biodiversity Strategy is being currently updated, has undergone consultation and will be approved within the next two months by the Council of Ministers. Accordingly sections I–III of the enclosed template have been completed in more general terms than proposed in the general guidelines. In National Biodiversity Strategy with period of implementation a decade (2020-2030), Cyprus set new goals for nature. It should also be mentioned that actions and measures are already implemented especially in protected areas (Natura 2000 network).

Section I. Information on the targets being pursued at the national level

I. Information on the targets being pursued at the national level

My country has adopted national biodiversity targets or equivalent commitments in line with the Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets

or

My country has not adopted national biodiversity targets and is reporting progress using the Aichi Biodiversity Targets for reference. (Move to section II. In section III, the Aichi Biodiversity Targets should be used for the purpose of this report as the national targets and progress should be assessed towards their achievement in the national context.)

If your country has set and/or adopted national targets or equivalent commitments related to the Strategic Plan for Biodiversity 2011-2020 please use the following template to describe them. Please complete this template for each of your country's national targets. National targets entered in this section will be linked to section III so that progress in their implementation can be assessed. If your country has not set or adopted any national targets related to the Strategic Plan for Biodiversity 2011-2020 please indicate so in the first box and move to section II.

National Target (Please use the official title, if available)

National targets are in line with the EU Biodiversity Strategy and UN CBD Goals (Aichi Targets) that are included in the National Biodiversity Strategy and Action Plan (NBSAP). Cyprus NBSAP contains 13 major strategic objectives as well as other supportive objectives, whereas this includes targets set out in the EU and UN Biodiversity Strategy. Ministry of Agriculture, Rural Development and Environment will play a leading role in delivering the vision. These major strategic objectives are based on the five strategic goals of the Convention on Biological Diversity (CBD) as well as the European Strategic Objectives for Biodiversity.

The Strategy covers the period from 2020 to 2030. The NBSAP constitute an instrument for integrating the conservation and sustainable use of nature and natural resources into national sector policies, in line with the objectives set by the European Biodiversity Strategy, the CBD Strategic Plan for Biodiversity and the Aichi Targets.

In order to reach biodiversity targets, Strategic Objectives (SO) of the NBSAP have been identified: 1) Conserve and restore biodiversity and ecosystem services in the wider countryside and in the marine environment; and Expand and improve management of protected areas for habitats and species; 2) Sustainable use of the Biodiversity Components (natural resources); 3) Conserve Genetic Resources – Access to Benefit Sharing; 4) Improve knowledge base for conservation, management, and sustainable use of biodiversity; 5) Mainstream biodiversity into decision-making across all sectors; 6) Increase awareness and appreciation of biodiversity and ecosystem services; 7) Improve governance for the protection of Biodiversity and strengthen international governance for biodiversity and ecosystem services and overall biodiversity policy; 8) Improve Capacity building; and target pressures and threats such as climate change and invasive alien species.

The National Biodiversity Strategy was adopted in June 2020, with strategy being on line with EU biodiversity strategic plan and the Aichi targets. The Biodiversity Strategy was developed in a comprehensive and participatory process initiated by the Department of Environment, Ministry of Agriculture, Rural Development and Environment. This process involved participants of all relevant competent authorities of the Ministry, representatives of the Game and Fauna Services, Ministry of Interior, Universities, NGOs etc.

SECTION I

Information on the targets being pursued at the national level

The Biodiversity Strategy was adopted in June 2020; the strategy is mostly in line with the strategic plan for the EU biodiversity and the Aichi targets. Targets being pursued at National Level described below.

1. Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society:

1.1. Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

The awareness of biodiversity in Cyprus is essential and continues efforts with activities being increase. Communities' awareness mainly takes place through workshops for biodiversity, LIFE and Interreg projects, as well as, during environmental days such as the Environment, Biodiversity, Natura 2000 days etc. Communication and awareness raising activities have been carried out from competent authorities (governments), NGOs and Universities, thus focusing on specific target groups and/or general public.

Local communities (including NGOs) are involved with biodiversity conservation issues since they were involved in several projects (LIFE projects etc.), participated in initiatives regarding biodiversity (e.g. planting trees in forested areas after wild areas) and implemented measures towards conservation (farmers – agri-environment measures).

In addition increased efforts and campaigns about biodiversity values, its conservation and sustainable use of its components were taken place through relevant projects (BIOforLIFE - An awareness-raising campaign in Cyprus for appreciating biodiversity in our life), enhanced education programs were implemented through the center of environmental education, and projects deliverables (e.g. iLIFE-Troodos “Troodos National Forest Park: Promoting natural values and Ecosystem Services”).

1.2. Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Integration and synergies between the implementation of Policies and Strategies such as the Common Agriculture Policy (CAP), the Marine Strategy, Forest Policy, Town and Planning Policy, River basin management policy etc., and biodiversity are applied.

Biodiversity concerns are crucial, and their integration in all relevant strategies, policies and planning activities (e.g. tourism, energy, agriculture, forestry, spatial planning) are taking place. Targeted activities were dedicated, in order to improve interrelations between land users and conservation and sustainable use of biodiversity.

1.3. Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.

Incentives with negative impacts on biodiversity, including certain subsidies, comprise direct financial support are evaluated in order to assess biodiversity impact. Agri-Environment measures have been implemented throughout the Island in all agricultural land in order to protected biodiversity and prevent its losses. An area of 12% of the Island is classified as agricultural land representing small scale farming areas of land on which much biodiversity can be positively or negatively affected depending on land management practices. Agriculture practices due to that agriculture utilize area (AUA) are quite small parcel are mostly in favour to biodiversity.

1.4. Target 4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Governments, business and stakeholders have taken steps to implemented plans for sustainable production and consumption at all levels. There are great efforts in order to keep the impacts of use of natural resources well within safe ecological limits. There are continuing efforts to integrate biodiversity into the development and implementation of several strategies such as key sectors like fisheries through the implementation of the Marine Strategy Framework Directive (MSDF), water management through Water Framework Directive, Genetic resources through implementation of the Nagoya Protocol etc.

2. Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

2.1 Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Natural habitats including forest are protected under the Habitats Directive as well as under the Bird Directive. Data on protected areas (reporting) in the Cyprus show that 45% of the habitats are in Favourable Condition (FV), but action over a considerable timescale will be needed to restore all of the remaining in order to be in favourable condition. The areas cover by Cedar (*Cedrus brevifolia*), Junipers spp. (*Juniperus*), Arborescent matorrals with *Ziziphus* and Gypsum steppes habitats actions has been taken to restored and re-created in the protected site of the Natura 2000 Network. Cyprus proceeded with conservation and restoration measures for habitats such as sand dunes, and *Quercus infectoria* forest. Additionally regarding species habitats of the fauna and flora, Cyprus implemented conservation and restoration measures in selected protected areas (e.g CareMediFlora etc).

2.2 Target 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

The Fisheries Resources Division's of the Department of Fisheries and Marine Research (DFMR) main task is the protection and sustainable management of the fisheries resources in Cyprus, aiming the maximization of the contribution of fisheries to the domestic fish production and the improvement of working conditions for professional fishermen.

2.3 Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Agriculture

An Agri-environment measures as well as Natura 2000 measures for farmers' have been applied in order to protect and conserve biodiversity in agricultural land, as well as in landscape level.

Forestry

Forest in state land in Cyprus is managed mainly for biodiversity conservation purposes. Main National Forest Parks (NFP) is included in the Natura 2000 network and they are managed for the biodiversity protection.

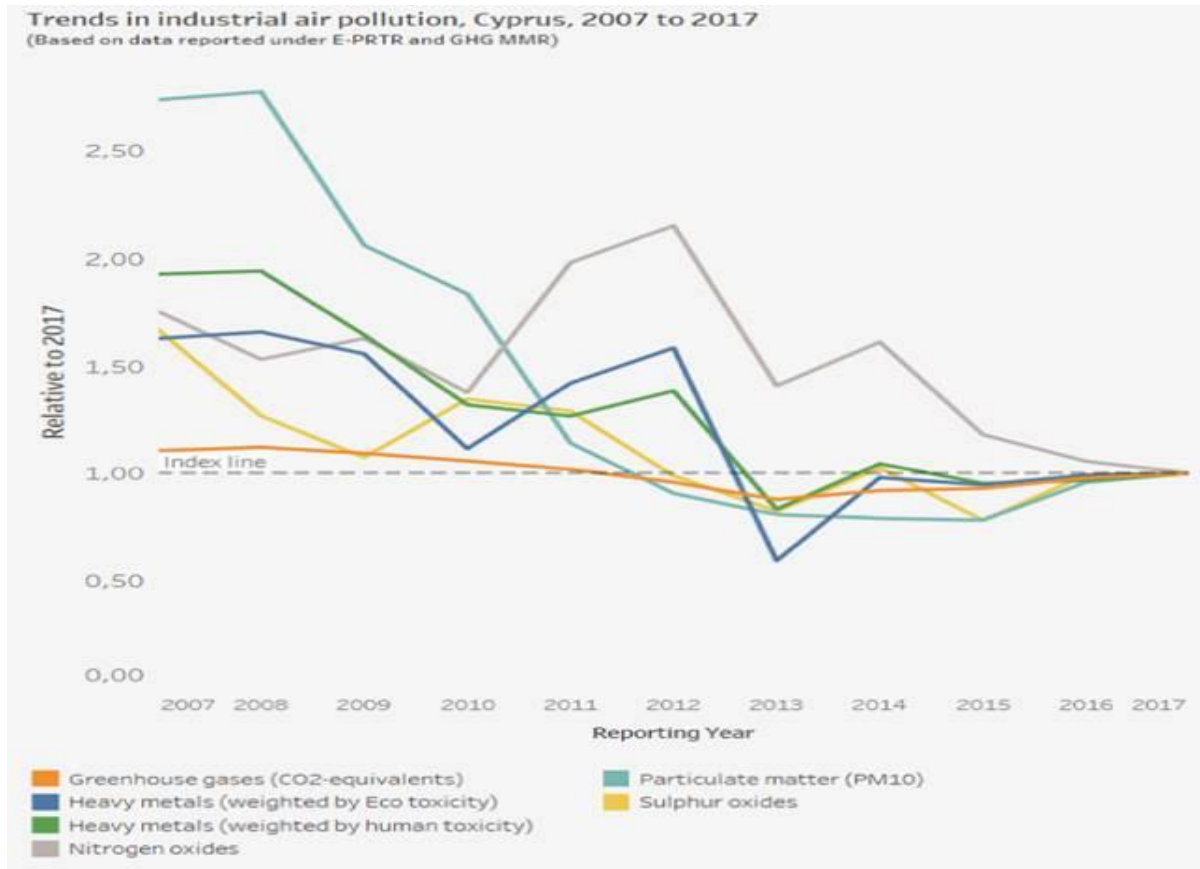
Aquaculture

The Sector of Aquaculture in Cyprus constitutes an important component of the primary agricultural production, showing impressive growth rates and a high quality export products.

2.4. **Target 8:** By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Trends of air

Pollutants trends are in the following link: <https://www.eea.europa.eu/themes/industry/industrial-pollution/industrial-pollution-country-profiles-2019/cyprus>



2.5 Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Regulation of Invasive Alien Species (IAS) transposed into National Law during 2019. A risk assessment will consider actions in order to identify invasive alien species, identify and control pathways of introduction and other measures to control or eradicate IAS. Actions and measures are including in an IP Project that Cyprus implement since 2019, thus including mapping, action plan, and management, control and eradication of IAS etc..

The analysis of pathways of unintentional introduction and spread of invasive alien species of Union concern in Cyprus was undertaken in November 2017 for the 37 IAS included in the Union List. Regarding the priority pathways of unintentional for 49 IAS, actions were identified, compiled and assessed in order to consulted for the final Action Plan.

Throughout LIFE projects as well as national funds there was eradication of acacia spp., removal from wild of the fauna species *Trachemys scripta*, *Procambarus clarkii* etc., especially in protected areas as well as in areas that funded to be expanded.

2.6 Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

There are evidences that climate change is affecting ecosystems in various and interacting ways, often with negative consequences for both habitats and species. Terrestrial ecosystems such as wetlands are vulnerable to rising temperatures and changes in rainfall and seasonality. Coastal ecosystems such as sand dunes are vulnerable to sea-level rise. Marine ecosystems are also vulnerable to increased water temperature.

Cyprus, prepare a Climate Change Adaptation Strategy that includes actions and measures for the mitigation for both terrestrial and marine ecosystems.

3. Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

3.1 Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Cyprus protected area network currently covers 29% of terrestrial and marine areas. Protected areas ensure conservation of species and habitats of Community Importance under the EU Natures Directives (Habitats and Birds Directives). The protected area network has been designated following principles for the ecologically representativeness and connectivity. All protected sites have management plans, an on-going monitor, as well as implementation of measures and actions in order to achieve good conservation status for the habitats and species.

Natura 2000 Network

Designation and management of protected areas are key mechanisms for taking action to reverse the loss of biodiversity. Protected areas cover many of the most valuable sites for biodiversity such as wetlands and rivers and sand dunes, safeguarding habitats and species of community importance. Protected area designation is continuing in order to cover insufficiencies (e.g. marine SPAs).

3.2 Target 12: *By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.*

Conservation Status of Species

According to the reporting period 2013-2018 (Art. 17 of the Habitats Directive) results indicate that species 64% are favourable (FV), 24% are unfavourable and 13% unknown. Actions are taken to conserve species and their habitats in protected areas as well as in areas that species are distributed.

Species micro-reserve was created for five endemic /rare species. Main objective of the project was the establishment of five plant micro-reserves in the field. Cyprus completed the Red Data Book of the Flora of the island, according to the categories of the IUCN. A project CARE-MEDIFLORA, “Conservation Actions for Threatened Mediterranean Island Flora: ex situ and in situ joint actions”, focused on improving knowledge and conservation of threatened island plants representative of the entire Mediterranean basin. Cyprus applied action for ten (10) flora species that their status is threaten.

Actions and measures are taken for the endemic subspecies *Natrix natrix cypriaca* in order to improve its conservation status and bring the population into a viable population size. Actions were completed through a LIFE project (ICOSTACY), and measures are continuing taken (through national funding) for the conservation of the species and their habitats.

There has been progress in improving the status (abundance and/or distribution) of same threatened species, largely through targeted interventions. Examples include successful re-introductions of the *Gyp fulvous* vulture. Measures are taken through LIFE project for birds of prey bonelli’s eagle

3.3 Target 13: *By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.*

Growing research in crop wild relatives (CWR) highlighted their value for crop improvement, particularly to mitigate the impact of climate change as well as contribute to global food security. As most conservation activities are implemented at national level there is a requirement for each country to develop and implement a national CWR conservation strategy. This will contribute to regional and global CWR conservation actions and achieve CBD Aichi Targets 13. The island is rich in CWR diversity, with an initial checklist of 1,722 Cypriot CWR taxa.

Cyprus has an invaluable genetic resource reservoir of pivotal significance of grapevine domestication and distribution, as well as local breeds of goat, sheep and cows, and varieties of vegetables. Local varieties and breeds are encouraged to be used by farmers since they are adapted to climatic conditions.

4. Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services

4.1 Target 14: *By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.*

Regarding ecosystem services Cyprus proceeded with the following related studies:

- 1) Roadmap for the implementation of an evaluation framework for ecosystem services in Cyprus (2015);
- 2) Mapping and Assessment of Ecosystem Services (MAES) in Cyprus (2017);
- 3) Mapping and Assessment of River Ecosystem Services (MAES) on selected sites in CYPRUS (2018);
- 4) Mapping and assessment of ecosystem services at Larnaka Salt Lakes and Oroklini Lake; and
- 5) Updated Road Map for MAES (prepared in 2015), for Harmonizing procedures, methodology and next steps, Includes the Glossary and terminology for MAES.

Additionally related relevant studies carried out during the LIFE + projects- Rizoelia, LIFE4Birds, LIFE Kedros, and iLIFETroodos.

4.2 Target 15: *By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.*

Restoration actions are taken mainly for forest after wild fire events, forestation of abandoned land is taking place through Rural Development Plan in abandon agriculture land, as well as forestation initiation in the cities (parks, etc). These actions contribute towards climate change mitigation.

4.3 Target 16: *By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.*

Cyprus ratified the Nagoya Protocol (2011) proceeds with transposition of the EU ABS Regulation into national legislation Law N. 49 (I)/ 2018 on compliance measures for users from the Nagoya Protocol (only elements that need to be regulated at member state level).

Studies to assess and map the degree of utilization of Genetic Resources in Cyprus, and a catalogue of possible users.

5. Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

5.1 Target 17: *By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.*

Cyprus develops the National Biodiversity Strategy and Action Plan 2020-2030, thus was adopted from the Council of Ministers during June 2020. There is a consideration of including of the main provision of the EU Strategy 2030.

5.2 Target 18: *By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.*

In Cyprus there are no indigenous peoples and local communities (IPLCs) as defined in Article 8j of the Convention and Target 18 has therefore not been assessed. The needs, knowledge and practices of IPLCs are recognised.

Traditional knowledge regarding the conservation and sustainable use of biodiversity in Cyprus can be related to traditional land-use practices, such as keeping and enhance use of local breeds and local varieties of animals or plants, as well as encourage farmers to use traditional agriculture practices in the small scale farming.

5.3 Target 19: *By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.*

Knowledge related to biodiversity, its values, functioning, status and trends, and the consequence of its loss are improved and shared within competent authorities, NGOs, Universities, and other stakeholders.

5.4 Target 20: *By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.*

Mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity has been granted through Structural fund, LIFE project (LIFE IP Physis), Rural Development Plan and National Funds.

IMPLEMENTATION STATUS OF THE EU BIODIVERSITY STRATEGY TARGETS

EU Strategy - TARGET 1: Fully implement the Birds and Habitats Directives

To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status.

Further protected areas have been established. The Natura 2000 sites in Cyprus includes areas that sum up 29% and it's among the highest protected network in EU (Cyprus ranks among the top five EU countries). The network includes 39 SCIs/SACs designated under HD 92/43/EEC) covering a terrestrial area of 752 km² (13.49% of area – EU average is 12.3%) and 130 km² of marine waters, and 30 SPAs designated under BD (2009/147/EC, Law 152(I)/2003) covering a terrestrial area of 1534 km² (26.7% of area, compared to an EU average of 18.1%), 7 sites are both SCI and SPA (185 km²) with overlapping boundaries. Cyprus Natura 2000 Network serves as a cornerstone of biodiversity conservation and the benefits of ecosystem services (ES).

Habitats and species assessment carried out during implementation of the Reporting (Article 17 of the Habitats Directive and Article 12 of the Birds Directive) period (2013-2018). Regarding latest Reporting for Habitats Directive (Article 17) results indicated that 45% of the habitats and 64% of the species has Favourable Conservation Status (FCS), 55% of the habitats and 24% of the species has unfavourable conservation status, and 12% of the species has unknown status.

Results for Birds Reporting indicate 35% increasing trends of breeding birds, 6% stable, 45% unknown, 14% decreasing.

Target 1 and 2 (Aichi T11) Conserve and restore biodiversity and ecosystem services – Protection of species and habitats- In Cyprus protected areas under the Natura 2000 network, characterized for both habitats and species of Community Interest according to Natures' Directives, are areas with rich biodiversity and high level endemism. The Natura 2000 network includes Special Areas of Conservation (SACs) and Species Protection Areas (SPAs). Cyprus proceeds with the implementation of the Habitats Birds and Directives and completed the ecological network Natura 2000, by including new sites in both marine and terrestrial.

Mapping and assessment of ecosystem services (MAES) - Cyprus developed a road map for assessing and evaluating ecosystem and their services, preceded with preliminary mapping and assessment of ecosystem services, identified the ecosystem types and their services and the indicators and main drivers of change of ecosystems. Specific mapping and assessment carried out for certain aquatic bodies (rivers and wetlands), and through LIFE projects there are assessments of protected areas and there over all role of ecosystem services in both terrestrial and marine environment.

Target 3 (Aichi T7) Achieve more sustainable agriculture and forestry- *Increase the contribution of agriculture to maintaining and enhancing biodiversity:*

Cyprus identified and developed biodiversity-related measures under Rural Development Plan (RDP) for farmers within and outside Natura 2000 areas in order to ensure conservation and protection of biodiversity and to bring measurable improvements for habitats and species that depend on or are affected by agriculture and in the provision of ecosystem services, thus contributing to enhance sustainable management. The measures include subsidies for pasture (priority habitat 6220), and agri-environment measures that contribute towards protection of both habitats and species.

Accordingly *Increase the contribution of forestry to maintaining and enhancing biodiversity*-Forest in Cyprus are not productive and therefore are maintained and management, for conservation. Forest Management plans are in place for all forests especially forest in state land and as mentioned there is no commercial wood extraction. Forests in Cyprus are maintained mainly for biodiversity purposes only.

Target 4 (Aichi T6) Making fishing more sustainable and seas healthier

Cyprus Fisheries Resources are maintained for protection and sustainable management, with priority the maintenance of the good environmental status of marine environment. Sustainable management of fisheries includes maximization of the contribution of fisheries to the domestic fish production and strategic planning stems. These objectives are achieved through the collection and analysis of biological, statistical and economic data relating to Fisheries resources.

Target 5 (Aichi T9) Combat Invasive Alien Species

Cyprus transposes IAS Regulation into National Law, and studies for pathways are identified and prioritised. IAS species are listed in EU list and there controls and eradication are already take place. Pathways of IAS are managed to prevent the introduction and establishment of new IAS. Additionally studies for mapping and action plan of IAS are proposed and measures for eradication and control are implemented.

Target 6 (Aichi T5) Help avert global biodiversity loss

The EU Biodiversity Strategy overall aims to stop biodiversity loss, and sets 13 targets towards achieving this goal. These goals are 1) improvement of available knowledge for the conservation of biodiversity; 2) protection and restoration of biodiversity; 3) evaluation of ecosystem and their services; 4) efficient management of protected areas; 5) sustainable use of biological and natural resources; 6) conserving genetic resources and equal sharing of their benefits; 7) improving governance in relation to conserving biodiversity; 8) capacity building for conserving biodiversity; 9) integrating biodiversity conservation goals in main sectoral policies; 10) addressing climate change of the impacts on biodiversity; 11) prevention of the impacts from invasive alien species to biodiversity (IAS); 12) Enhancing awareness and improvement of participation of Stakeholders in conservation of biodiversity; 13) resource mobilisation for biodiversity conservation. (*Mentioned above*)

Rationale for the national target

The three objectives of the Convention on Biological Diversity (CBD)- the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of benefits arising from the utilisation of genetic resources-, are the core components, towards halting biodiversity loss. Cyprus National Targets based on Aichi (CBD) and EU Biodiversity targets.

The distribution of natural forest (woodland), the rivers and wetlands, the coastal and anthropogenic ecosystems (agriculture ecosystems), defines the island's landscapes a mosaic that is rich in biodiversity. Due to the location of the island between the three continents-Europe, Asia and Africa-, its geomorphological and climatic heterogeneity and its rich biodiversity of species and ecosystems, Cyprus is characterised as a biodiversity hotspot. The mosaic of the landscapes depends on the diversification of natural and agricultural ecosystems. Within the legal framework of Habitats and Bird Directives, Cyprus designated 63 Natura 2000 sites (protected areas) throughout the Island, encompassing both marine and terrestrial areas, with both areas considered to be nearly complete and covers an area of 29% of the area under government control.

Cyprus integrates biodiversity components (e.g. protected areas) into several related policies (e.g. forest and water) and strategies (climate change and Desertification). Given the benefits that biodiversity and ecosystem services supports many sectors especially the economy (pollinators), efforts for integration and mainstreaming should be improve (e.g. agriculture, town and planning and tourist).

The National biodiversity strategy includes actions and measures for the protection of biodiversity focusing on the priorities set for measures and actions that are identified and implementation will be carried out through funding from LIFE Integrated Project (IP Physis), Structural Fund (CF) and National Fund (NF). National targets fulfil criteria for protection, conservation and restoration of biodiversity and sustainable use of its components and implementation of the CBD convention and other interrelated convention (Climate Change, Desertification, Bern and Bonn, CITES, etc., the Natures' Directives and Environmental Legislation.

Inventories and monitoring are defined and applied on the basis of existing guidelines for monitoring and obligations for reporting at EU and CBD level. Indicators and evaluation criteria will enable the evaluation of progress towards the targets at national level.

There is a monitoring system based mainly on EU guidelines for the habitats and species of community interest (HD and BD), monitoring for the Water Framework Directive for all aquatic ecosystems, monitoring for marine environment (e.g. *P. oceanica*, and non-indigenous species, fishing activities and resources etc.) and monitoring of nitrate pollution. Monitoring involves physical measurements/observations of the chosen biodiversity and activities indicators year on year for comparison with the current status of biodiversity and pressures from threatening activities. This comparison together with a study of the causes of threatening processes will be most useful for an adaptive management of threatening activities. It is necessary to further assess the impact on biodiversity of human activities and of threats arising climate change and desertification, as well as relations between those processes and activities in order to take the most appropriate measures to minimise their impacts. When considering the various potential impacts of these emerging risks, attention should be paid not only to impacts on specific components of biodiversity but also to community structures and global ecosystem functions and services.

For improving Biodiversity integration an operational tools and systems for improving governance and management of Natura 2000 was proposed via LIFE IP project that consist a communication platform which will be developed and delivered to all relevant stakeholders and the wider public (Citizen Science) which will offer an interface opportunity to all users to receive and upload useful information, thus increasing awareness, as well as mainstreaming information into policy and governance.

Through targeted efforts with measures and actions that are developed (IP Life projects, Cohesion Fund, etc.), we will attempt to alleviate pressure on biodiversity.

Furthermore an effort has been made to integrate biodiversity into the development and implementation of several policies. However, these efforts are still not sufficient. The EU Biodiversity Strategy seeks to improve integration in key sectors, including, fisheries through the implementation of the CFP, and the wider marine environment through the implementation of the Marine Strategy Framework Directive (MSFD), agro-environmental measures through CAP etc..

Major threats and pressures are going to be tackle through specific actions and measures. Among those threats and pressures are land use changes and fragmentation, invasive alien species (IAS), which pose a significant threat to biodiversity.

Summary of Strategic Objectives

Strategic Objective 1: *Improving knowledge for biodiversity conservation*

SO will enforce improvement of basic research and increase available knowledge for all biodiversity components. Particular emphasis will be towards implementation of relevant measures, such as the enhancement of biodiversity research in order to fill gaps for all biodiversity ecosystems (habitats and species and their habitats, as well as landscape features), development of the Red Data book for Habitats and Species as well as development of a National Museum of Natural History.

Strategic Objective 2: *Biodiversity Conservation and Restoration*

Develop an integrated monitoring system for assessing conservation status of species and habitats and implement conservation measures that are required on a case-by-case basis and restoration of habitats and ecosystems. The measures included in the Biodiversity Action Plan, such as the drafting national action plans for species and habitats, will help to achieve the above. In addition, landscape characteristics should be taken into account in spatial planning in order to avoid adverse effects from landscape alteration (application of Article 10 of the Habitats Directive). Further conservation and restoration measures are proposed to be implementing through Structural Fund and IP LIFE project (IP LIFE Physis).

Strategic Objectives 3: *Evaluation and conservation of ecosystems and their services*

Mapping and evaluating ecosystems and their services is a valuable tool for facilitating the integration of conservation objectives into all sectoral policies and spatial planning. Assessment of ecosystem services can introduce the economic advantages of ecosystems and their services they provide.

Evaluation of Ecosystems is carried out through monitoring under the obligation of the Habitats Directive, Marine Strategy Directive Framework (MSDF), Water Framework Directive and other relevant directives and strategies.

Further evaluation and conservation of ecosystems and their services is carried out through co funded projects (e.g.LIFE) as well as through national fund. Progress regarding further development on MAES is expected in the near future, since actions are included in an Integrated LIFE Project (IP LIFE PHYSIS).

Strategic Objectives 4: *Management of Protected Areas*

The management of protected areas (habitats, species and landscape coherence) can halt the loss of biodiversity by addressing pressures and threats, as well as restoring habitats and species habitats. Emphasis should be placed on the coherence of the Natura 2000 Network in order to protect the landscape elements that contribute to the protection of biodiversity. A useful tool is, for example, the creation of ecological corridors between protected areas. The management of protected areas will be improved by the re-evaluation/updating of existing management plans (where appropriate) and the completion and adoption of the Special Area of Conservation (SACs), as well as development of Decrees for their Management (Article 15 of the Protection and Management of Nature and Wildlife Law No. 153(I)/2003). In addition action plan for species and habitats will be carried out through LIFE IP Physis project. In addition Decrees will be developed for the Special Protected Areas (SPAs).

Strategic Objectives 5: *Sustainable use of biological and natural resources*

Sustainable use of biological and natural resources requires, inter alia, an assessment of the state of agricultural land, pastures, water resources and an assessment of the effectiveness of management measures for catches (in specific areas for both birds and fish stock) in order to avoid further degradation. On the basis of this assessment, effective measures can be designed to ensure their sustainable use and to halt biodiversity loss due to degradation of land and water resources. Proper management of Areas of High Natural Value (HNV) can be an integrated model for the sustainable use of biological and natural resources. Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Strategic Objectives 6: *Conservation of genetic resources and equal sharing of their benefits*

The Nagoya Protocol entered into force on 12 October 2014 and establishes a general framework for access to and exploitation of genetic resources. In the EU, Regulation 511/2014 applies to monitor the compliance of users of genetic resources in order to ensure the legality of their acquisition and the fair and equitable sharing of the benefits resulting from their use. Cyprus implements the Regulation through National Law N.49(I)/2018 and a study has been carried out which will form the basis for the creation of a legal framework for access to genetic resources and a fair and equitable sharing of the benefits resulting from their use. At the same time, genetic resources must be mapped in order to create a database and strengthening research for genetic structure and composition of wildlife populations and ex situ conservation.

Strategic Objectives 7: *Improving governance in relation to biodiversity conservation*

To improve governance in relation to biodiversity conservation Cyprus proceed with implementation of Nature Directives, Marine Strategy Framework Directive, Water Framework Directive, as well as other related policies and strategies. For the management of protected areas, it is proposed to create a Natura 2000 Protected Areas Management Platform, which will facilitate in cooperation and coordination of relevant departments/services and reduce administrative burdens.

Strategic Objective 8: *Capacity Building for the biodiversity conservation potential*

Capacity Building for Biodiversity conservation will result from the implementation of an integrated biodiversity capacity improvement plan. In this context, organisation of workshops to train the staff of all stakeholders (e.g. local government, public services and departments, associations, non-governmental organisations, academic institutions, users, landowners and others) on biodiversity and ecological value of protected areas and the preparation and implementation of a capacity building plan in relation to the management of protected areas will play a catalytic role.

Strategic Objective 9: *Integration of biodiversity conservation objectives into the main sectoral policies*

In order to achieve biodiversity conservation objectives, there should be integration into all state sectoral policies in order to take account of them in the preparation of development programmes and to minimise the impact on biodiversity. This ensures the compatibility of all activities in other sectors, such as agriculture (including livestock farming), fisheries, tourism and building and industrial development, infrastructure and public road projects with biodiversity conservation efforts. The Action Plan includes a programme of measures to integrate biodiversity conservation objectives into Cyprus' main sectoral policies. In particular, with regard to the agricultural sector, a number of measures contributing to the conservation of biodiversity will be implemented through the Rural Development Programme.

The National Biodiversity Strategy will increase actions for integrating the conservation and sustainable use of biodiversity into national policies, for its intrinsic and tangible value and for the importance of services ecosystems. Biodiversity values are planned to be incorporated into national accounting and related actions are included in LIFE IP project that initiated in 2019.

Strategic Objective 10: *Addressing climate change impacts on biodiversity*

The Cyprus Council of Ministers has adopted the National Strategy for Adaptation to Climate Change in May 2017 (revised every year) and the National Energy and Climate Plan, 2021 – 2030. Thus, in conjunction with the forthcoming adoption of the Strategy and Action Plan to Combat Desertification, the impact of climate change

on biodiversity will be dealt with holistically since the measures they contain coincide with several of the measures of the Biodiversity Action Plan. The three Strategies (on Biodiversity, Climate Change and Desertification respectively) together with the National Energy and Climate Plan will work collaboratively in achieving their common objectives and it is expected that coordination in their implementation will act as a catalyst in mobilising resources and implementing the relevant measures.

Strategic Objective 11: *Prevention and treatment of impacts on biodiversity from invasive alien species*

Targeted management actions for invasive species so far included in the Union list under Regulation 1143/2014 aiming to reduce and control the spread of species and mitigating their adverse effects on biodiversity. Effective treatment of invasive species requires the operation of an integrated system with prevention measures such as restrictions to introduction routes, early detection measures such as surveillance and controls to prevent species from entering, rapid eradication measures in the early stages of invasion and measures to monitor and manage spread species. Cyprus start to create a database on invasive species which can be a list of national interest, develop a national action plan based on the data and implementing action plans to deal with the most harmful invasive species.

Strategic objective 12: *Enhance education and strengthening the protection and participation of civil society in the protection and conservation of biodiversity*

Efforts to conserve biodiversity that are not supported by local communities are very difficult to achieve. For this reason, this Strategy places particular emphasis on raising awareness and participation of the society in biodiversity conservation. Some of the measures included in the Action Plan are implementation of information and participation plans for local communities in the management of protected areas, the development of information and training programmes for farmers to adopt good practices and the production of educational material on the biodiversity of Cyprus.

Strategic Objective 13: *Mobilisation of resources for biodiversity conservation*

The implementation of the Strategy can be financed from national resources as well as from various European funds; such as the European Regional Development Fund (ERDF), the European Marine and Fisheries Fund (EMFF), the European Agricultural Fund for Rural Development (EAFRD), the Water Framework Directive (2000/60/EU - River Basin Action Plan), the Marine Strategy, the LIFE and Interreg Programmes and other relevant sectoral programmes. Various research activities related to biodiversity and its conservation can be funded through the Research and Innovation Foundation (RIF). The creation of a specialised structure to mobilise resources to develop research and other actions related to biodiversity conservation and sustainable development of Natura 2000 areas will help to develop an integrated plan to make the best use of available resources.

Level of application (Please specify the level to which the target applies):

- Regional/multilateral – please indicate area concerned <Text entry>
 National/federal
 Subnational – please indicate area concerned <Text entry>

Relevance of the national targets to the Aichi Biodiversity Targets (Links between national targets and Aichi Biodiversity Targets.)

Main related Aichi Biodiversity Targets (Please select one or more Aichi Biodiversity Target to which the national target is wholly or partially related. Parties can select an entire target or a target component (not shown below))

1 6 11 16
 2 7 12 17
 3 8 13 18
 4 9 14 19
 5 10 15 20

Other related Aichi Biodiversity Targets (Please select one or more Aichi Biodiversity Target to which the national target is indirectly related.)

1 6 11 16
 2 7 12 17
 3 8 13 18
 4 9 14 19
 5 10 15 20

or

National target has no corresponding Aichi Biodiversity Target or relates to other parts of the Strategic Plan for Biodiversity – please explain

Objective 1. Expand and Improve Knowledge for management and conservation

Rationale: Scientific knowledge is essential for the assessment of the status of biodiversity, for better understanding the causes of biodiversity loss and for developing policies and means to halt or reverse losses. Knowledge on biodiversity, its values, structure and functioning of the ecosystem, status and trends for habitats and species, as well as drivers and consequences of its loss should be improved. The Strategy will therefore focus the efforts where they are most needed, i.e. improvement of knowledge on components of biodiversity that are mostly threatened or could be subject to high risks in the near future (e.g. due to climate change or land use change and fragmentation). Priority components of biodiversity requiring the most urgent protective measures are identified and their status monitored.

Actions on improving knowledge base for conservation, management and sustainable use of biodiversity include among others: Revision of priority needs for biodiversity research e.g. ecosystem functioning, ecological requirements of habitats and species in order to improve their conservations status; Completion and development of habitat, species, and ecosystem services **maps**; Develop a national monitoring scheme for habitats and species as well as IAS species; Support research and improve knowledge on economic and non-economic valuations of ecosystem services and benefits and on how biodiversity underpins these values; Improve knowledge and surveys and assessments of status, trends and distribution of all habitats and species of EU interest as well as habitats and species of national and regional importance; develop red data book for habitats and fauna species and national catalogues for the endanger habitats, and species; Improve scientific research on biodiversity issues on both marine and terrestrial environment(habitats and species); Development of a set of National Biodiversity Indicators, to allow assessment of Cyprus biodiversity commitments for next decade;

Objective 2. Conserve and restore biodiversity

Rationale: Biodiversity is facing numerous pressures and threats, and in order to halt its loss we need to enhance our effort to conserve and restore ecosystems and their services. According to national report (under Article 17 of the HD and Article 12 of the BD) to the EU on the condition of habitats and species of European interest showed that habitats not in favorable condition are 55% and species are 24%. The main pressures and threats to biodiversity in Cyprus are: natural habitats and agrosystems modifications, destruction and fragmentation and loss (land use change, natural habitats modification especially coastal and freshwater habitats), agriculture (abandon and intensification), invasive species, and anthropogenic disturbances (hydrological destruction). The aim of objective is to enhance management of protected areas and other effective area-based conservation measures and to promote connectivity of the network. The objective is based on the concept of ecological network Natura 2000 and will include the ecological requirements of the priority components of biodiversity in order to ensure their maintenance and improve conservation status.

The Natura 2000 network covers up to 29 % both terrestrial and marine sites.

Additionally to this network, other surfaces are effectively conserved through other conservation measures such as some Agri-Environment Measures, late mowing of road banks, sustainable forest management measures.

An effective management is crucial and has to be ensured conservation status of protected areas. For the time being, only a limited number of sites are effectively managed and these sites are public forest and it is vital that appropriate management plans are adopted and implemented for other sites as well.

Actions and measures for the objective include: develop and implement a holistic monitoring scheme; implement management plans; develop action plans for habitats and species; mapping of landscape elements including landscape cultural elements; develop long-term monitoring schemes to enable tracking of biodiversity change over time; Conducting research regarding the threats posed to Cyprus biodiversity by main pressures including climate change, desertification, IAS, pollution, land degradation and modification;

Objective 3. Mapping and Assessment of Ecosystem Services

Rationale: Mapping and Assessment of Ecosystems and their Services (MAES) initiative aims to improve knowledge of ecosystems and their services, added value of the ecosystems and prevent further deterioration (EU Biodiversity Strategy target 2, action 5). This implies that Member States (MS) should map and assess the state of ecosystems and their services on their national territory and assess the values of such services and promote the integration of these values into accounting and reporting systems at EU and national levels. Future work is needed for developing an understanding of ecosystem services and how people can use ecosystem services and in broader extent biodiversity in sustainable way.

Actions for the objective include: Mapping and assessment of ecosystem services; and enhance awareness of the producers for ecosystem services;

Objective 4. Management of Protected Areas.

Rationale: Protected areas have been in place for two decades and their management is an ongoing effort. To ensure protection of the sites for both habitats and species, management plans and the integration of different policies aimed at the conservation components of protected areas and their biodiversity. Consultations on Natura 2000 management and conservation objectives and implementation with other authorities and stakeholders aim to enhance the integration of species and habitat protection into policies and spatial planning.

Actions and measures of the objective include: completion of Natura 2000 areas especially the marine sites for both Natures' Directives (HD and BD); develop green infrastructure plan; updated and implement management plans; managed other protected areas i.e. High Nature Value farmland areas (HNVf); monitor prioritize action framework (PAF) for protected areas.

Objective 5. Sustainable development of the biodiversity components.

Rationale: In order to prevent biodiversity loss, the biodiversity components are important to be conserved and used in a sustainable way (2nd Objective of CBD). National Biodiversity Strategy includes all measures needed for sustainable use of biodiversity components.

Actions include: use HNVf areas for farming and keep their conservation status in good condition according to their designation rules (i.e. less input of fertilizers, livestock per ha., etc); carrying capacity for grazing in natural pasture (grasslands); effective measures for fishing stocks; evaluation game (hunting); and evaluation of water resources.

Objective 6. Conservation of genetic resources.

Rationale: Genetic resources, their use and the fair and equitable sharing of benefits arising from their utilization (ABS) is the third objective of CBD. The Nagoya Protocol on ABS has been ratified by Cyprus. Within the international and European framework, the competent authorities of MS should proceed with the development of legal measures in order to enable its implementation.

Actions of the objectives include: ex situ conservation of plant species; develop national catalogue of local breeds and varieties; strengthening research into the recording and characterization of genetic resources; implement Nagoya protocol; develop database of genetic resources; enhance research about genetic resources (i.e. wild relatives of plant species); and mapping of wild relatives.

Objective 7. Improve governance in relation to conservation of biodiversity.

Rationale: NBS includes provisions for the establishment of a Biodiversity committee in which, in addition to the competent authorities, with representatives of academic institutions and non-governmental organizations and other stakeholders such as representatives of local communities. The Committee will have an advisory role in the implementation of the strategy in order to improve governance in relation to the management of protected areas, which will facilitate cooperation and coordination of the relevant departments/services and limit the administrative burden.

Actions of the objective include: Initiation of the Committee; initiation of management bodies of the protected areas; develop an e-platform for Biodiversity.

Objective 8. Capacity Building

Rationale: National authorities responsible for protection and conservation of biodiversity need to reinforce their capacities both financially and technically. Effective conservation of biodiversity and biological resources requires by means specific trainings, revision of administrative structures, adoption of mechanisms for adequate support and promotion of inter-sectoral planning and synergies.

Actions of the objective include: Organization of workshop and training, and preparation of supporting material for the education of staff of the competent authorities and other stakeholders for biodiversity issues; Design and implementation of a capacity building plan to improve the management of protected areas of the Natura 2000 network; develop e-platform for information and communication of protected areas and awareness actions;

Objective 9. Mainstreaming of Biodiversity in other sector policies.

Rationale The sectoral integration or mainstreaming of biodiversity means the integration of the conservation and sustainable use of biodiversity in both cross-sectoral plans such as sustainable development, climate change adaptation/mitigation, trade, international cooperation and poverty reduction, and in sector-specific plans such as agriculture, fisheries, mining, energy, tourism, transport, finances, sciences policy and others.

The Cancun Declaration (2016 COP 13) during the 13th Conference of the Party (COP) of the Convention on Biological Diversity (CBD) focuses on the need of Governments at national, regional and local levels to mainstream conservation and sustainable use of biodiversity for human well-being. This can be achieved through sectoral and cross-sectoral policies, plans and programs, as well as establishment of an effective legislative and regulatory framework that will incorporate certain approaches for mainstreaming biodiversity.

Actions of the objective includes: Integrating biodiversity into other policies, strategies and legislation, so as to ensure that conservation and sustainable use of biodiversity are taken into account in all relevant Plans and Programmes and new regulations; Strengthening ecological expertise in local authorities and relevant Government Departments and relevant agencies; Public and private sectors should make use of best practices regarding EIA, SEA, AA and/or other assessment tools to ensure proper consideration of biodiversity into Strategies, Policies and Plans; Encouragement of Local Authorities for reviewing and updating their Development Plans and Policies in order to incorporate objectives regarding the protection and conservation of biodiversity, as well as its sustainable use; Development of a Green Infrastructure scheme for local, regional and national levels in order to promote the use of nature-based solutions for the delivery of a coherent and integrated Green Infrastructure network; Development of guidance documents for Local Authorities and relevant sectors (e.g. agriculture) regarding the protection of biodiversity, especially in designated areas; Integration of biodiversity into Climate Change Adaptation Plan and Action Plan for Combating Desertification; Development of incentives for specific target groups (e.g. landowner and farmers) where necessary, in order to assist the conservation of biodiversity.

Objective 10. Adaptation of climate change

Rationale: Regarding climate change and its impact on biodiversity there are actions and measures in the Climate Change Adaptation Strategy of Cyprus. It is important to promote research of the impact of climate change on the biodiversity of Cyprus in order to protected areas affected by climate change.

Actions of the objective includes: Development of research activities to assess the potential impacts of climate change on the flora, fauna and habitats of Cyprus; Development of a plan to adapt habitats and species of nature protection areas, and above all Natura 2000 areas, to climate change.

Objective 11. Prevention and control of invasive alien species and its impacts on biodiversity

Rationale: Targeted management of invasive species that have been registered to date in the Union list issued under Regulation 1143/2014 and other species to be recognised as national interest will be implemented under the regulation and the new national legislation aimed at reducing the spread of species and mitigation of their adverse effects on biodiversity.

Actions of the objective includes: Creation of a database of all invasive alien species of plants and animals that respond in Cyprus, with data on the spread of all kinds and impacts on biodiversity; Development and implementation of action plans for invasive alien species including measures to address import and spread routes, eradication and management measures and ecosystem rehabilitation measures; Elaboration of an impact assessment study on biodiversity from the presence of invasive alien species in protected areas; Development of a surveillance system for early detection of a new occurrence or spread of invasive alien species and informing the competent authorities of the eradication measures; Development of an information programme for the public on the problems caused by the introduction and release of invasive alien species (flora and fauna) in the biodiversity of Cyprus. At the same time, enhance the dissemination information on the advantages of using native species

Objective 12. Enhance awareness of local communities of the conservation of biodiversity

Rationale: Efforts to conserve biodiversity that are not supported by local communities are very difficult to achieve. For this, this strategy gives particular weight to raising awareness and involving society in preserving biodiversity.

Some of the measures included in the action plan are the implementation of local communities' information and participation plans in the management of protected areas, the development of information and training programmes for farmers to adopt good Practices and the production of educational material for the biodiversity of Cyprus.

Actions of the objectives includes: Develop and implementation of awareness plan for local communities about Natura 2000 areas, and active participation in the management of the areas; Development of information programmes for tourists regarding issues of nature, biodiversity and protected areas in Cyprus; Development of information/training programmes for the agricultural sector for the adoption of practices that maintain and enhance biodiversity; Developed educational and pedagogical material in printed and electronic form, related to the Cyprus biodiversity, on the basis of the utilization of the foreseen learning outcomes of the thematic unit of the curriculum for the Biodiversity and Sustainability and on the basis of a holistic and cross-curricular approach to the issue; Developed informative seminars and training programmes for biodiversity;

Objective 13. Resource mobilization

Rationale: The implementation of the strategy's actions and measures can be financed by national resources as well as by various European funds, such as the European Regional Development Fund (ERDF), the European Maritime and Fisheries Fund (EMFF) and the European Agricultural Fund for Rural Development (EAFRD), the Water Framework Directive (WFD 2000/60/EU-river Basin Action Plan), the Marine Strategy, the LIFE and Interreg programmes.

Actions of the objectives include: Creation of a unit (team) for mobilizing resources to promote and develop actions related to the conservation of biodiversity, in order to optimize and utilize available resources; Implementation of projects for the conservation of biodiversity funded by European and national programmes; Exploiting opportunities by submitting proposals for funding from various European funds; Promotion and development of initiatives for actions compatible with biodiversity conservation

Other relevant information

Cyprus developed the National Biodiversity Strategy (NBS), which includes measures that corresponds to International Aichi Targets and the EU Strategy Targets. NBS was not legally adopted (from the House of Representative), but national target regarding the CBD objectives (mainly restoration and protection) was implemented. The text of NBS it's thoroughly revised, enriched and updated and was subject to public consultation. The NBS was presented the 2nd December 2019 and the opinions and the comments of the general public will be evaluated and a clear version will be submitted to the House of Representatives for adoption.

In the Strategy there are 13 targets that correspond to both Aichi and EU targets (as describe above), thus include about 80 actions and measures. Targets correspond to the improvement of the knowledge for biodiversity (conservation purposes); conservation and restoration of biodiversity; mapping and assessment of ecosystem services; management of protected areas; sustainable use of the biodiversity components (biological and natural resources); conservation of genetic resources and regulate the access and utilization of biological resources; improve governance of protection of biodiversity; capacity building for the protection of biodiversity; integrate and mainstream biodiversity into other policies and strategies; Tackling climate change impacts on biodiversity; Prevention and control of impacts on biodiversity by invasive alien species; Enhancing awareness and participation of society for biodiversity conservation; and mobilization of resources.

Action and measures includes scientific research for a broad aspects, analysis and studies regarding biodiversity,

improving knowledge, enhance education and campaigns, enhance protection and restoration, enhance implementation of CBD, enhance mainstreaming into other policies etc..

The implementation of National, European and International Environmental Legislation and the protection of the components of biodiversity require prioritisation of actions which included in Strategy. Prioritization will be focused on aspects necessary for select species and habitats that require increased protection, management or restoration based on specific criteria. The criteria include: their importance in the context of biodiversity (rarity, endemism), their conservation status, risk of genetic erosion, and the severity or importance of the threats/pressures they face.

The conservation status of species and habitat types is a national legal obligation that arises from Natures Directives, which it is an important tool for the inventory and management of the state of biodiversity in Cyprus. Therefore, the development and application of scientific monitoring plans for species and habitat types of community importance are required on the scientific basis, with particular emphasis on the obligation of the Natures Directives 92/43/EEC and 2009/147/EU. This issue was revealed by a recent assessment of the conservation status of species and habitats of Community interest, which was performed in the context of the third national six year report in accordance with article 17 and 12 of the Directives 92/43/EEC and 2009/147/EU respectively.

According to the provisions of the Habitats and Birds Directives, habitats and species of European importance should be in favourable conservation status in order to prevent further loss or deterioration of biodiversity at national scale and EU scale. Status assessment for habitats and species under the Habitats Directive (92/43/EEC) Directive (2009/147/EC) indicate that 45% of habitats and 64% of the species are in favourable (FV) conditions. Cyprus develops a road map for mapping and assessment of ecosystem services and proceeds with the assessment of ecosystems services and some pilot studies for aquatic ecosystems (wetlands and rivers).

According to Strategic Goals of CBD Cyprus implement them as follow:

Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society Cyprus integrate biodiversity values into other policies and strategies across other governmental sectors and cross sectors. For example provisions of National Natures Legislation are included in Town and Planning Legislation. All sectors must be engage in order to ensure protection and restoration of biodiversity, thus actions will be undertaken to raise awareness within Governmental Departments, local authorities, and wide range of stakeholders. Actions for increase awareness of the society (local communities) are enhanced.

Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

Cyprus designates High Nature Value farmland (HNVf) areas that correspond to sustainable agriculture practices. HNVf areas are spread across the island and aiming to enhance sustainable use in the agriculture sector.

Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Cyprus designate protected areas for the ecological network Natura 2000. The Natura 2000 network consists of the mountainous regions, the plains (agro ecosystems), and inland waters, the coastal and marine ecosystems (habitats and species. Under Natura 2000 network, sites are characterised for their diversity and they serve for safeguarding ecosystems, species and genetic diversity. Cyprus designates 29% of the island as Natura 2000 areas.

Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services

Ecosystem services are important for the society in order to protect and value biodiversity and protect Nature. There are lots of initiatives for assessing and promote ecosystem services through LIFE and national Funds.

Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

Implementation of the CBD provisions need to be enhance through improvement of knowledge and capacity building. Cyprus run a LIFE Capacity Building projects in order to improve biodiversity relate projects.

Relevant websites, web links, and files (Please use this field to indicate any relevant websites, web links or documents where additional information related to this national target can be found.)

<http://www.moa.gov.cy/moa/environment/environmentnew.nsf/All/1D6834B435508010C22584B7002F6D1D?OpenDocument>

Section II. Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Using the template below, please report on the major measures your country has taken to implement its national biodiversity strategy and action plan. Please also provide an assessment of the effectiveness of these measures. The template should be replicated for each measure reported.

II. Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Transposition of European Nature Directives into Cyprus law has enable competent (governmental) authorities to enforce the way towards the establishment of the Natura 2000 network that is representative of the most important habitats and species, considering the most appropriate conservation mechanism for biodiversity. Cyprus has taken various actions and measures that contribute to complying with CBD and EU Biodiversity Strategy goals. Actions include completion of the Natura 2000 network in both terrestrial and marine sites, as well as measures for protection and restoration for habitats and species; Measures and actions that are implemented through national funds, LIFE and Interreg project, cohesion and structural funds; measures through the CAP (Rural Development Fund) and Fisheries funds.

A key important aspect of Biodiversity is the Natura 2000 Ecological Network of protected areas. The Natura 2000 consists of 63 sites (SCIs/SAC and SPA) with a total coverage of almost 186224 ha, corresponding to 29% of terrestrial and marine area under effective government control. For the sites (SCIs/SAC and SPA) there are management plans. Forest land is efficiently protected, and the conservation status habitats and species of Community interest are properly protected, as required by the Habitats and Birds directives, but also by national environmental legislation.

Measures include: restoration of habitats (including priority habitats *Cedrus brevifolia*), as well as restoring or improving habitats for the species (improving habitats for the endemic flora *Ophrys Kotschyie*, *Arabis Kennedyae*, *Astragalus macrocarpus*). Additionally, conservation measures for *Juniperus* spp., sand dunes, Cedar forest, habitats, are in place through LIFE + projects.

Additionally Cyprus implements a project call 'CARE-MEDIFLORA', a project that focus on rare and vulnerable plant species in Cyprus. Accordingly the Natura 2000 plans, the River Basin Management Plan the Marine Strategy, the Climate change adaptation strategy and the desertification strategy, a number of nature restoration initiatives for forests destroyed by fires, are being implemented.

Furthermore High Nature Value farming (HNVf) areas are designated and support high biodiversity values. For example, under the Cypriot Rural Development Programme, there are measures such as subsidies for farmers in areas that are overgrazed in natural areas, for farmers that practiced agriculture in HNVfs, among other measures.

Measures such as fencing of sand dune, creation of paths and control of invasive species are in place for the restoration and conservation of the costal habitats.

On annual basis measures are in place for the *Ovis orientalis ophion* (Cyprus Mouflon) the endemic subspecies of Cyprus, which improves its conservation status (creation and cleaning of water pond, fields' cultivation for grazing, openings within forest, etc.). Additionally, for the Cyprus muflon we designed a RDP measure.

Regarding birds there are LIFE and Intereeg projects that are specified for the conservation and improvement of the status of the species. In addition there is agri-environmental in RDP for the conservation of birds'

species.

In addition to the above certain measures for Natura 2000 areas will be implemented within the framework of the LIFE Integrated project Physis that Cyprus has newly awarded. The main objectives of the IP Physis are to implement concrete conservation measures for habitats and species of Community interest that are threatened; develop Action Plans for selected habitats and species; develop/update and implement Management Plans; enhance studies on ecosystem assessment and their services; enhance effectiveness of governance and Natura 2000 management bodies for conservation of protected sites, Strengthen the coherence between Natura 2000 network sites and improve their connectivity; developed database system for the Natura 2000 network; Improve capacity building, knowledge and awareness of key stakeholders (organisations, authorities and the general public) with respect to the implementation of the Birds the Habitats directives, and the Natura 2000 network, as well as their responsibilities and involvement in its conservation; enhance awareness of the protected areas including ecosystem services; and disseminate the results of the project and ensure their implementation, transfer and replication by other stakeholders, nationally and at EU level.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Aichi Targets: 3, 7, 8, 9, 11, 12, 14, 15, 20

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:

- Measure taken has been effective
- Measure taken has been partially effective
- Measure taken has been ineffective
- Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The Natura 2000 network is the cornerstone of biodiversity conservation in EU. The effectiveness of all projects implemented (measures and actions) was very important for the conservation of selected habitats and species of community interest. Management measures are targeted for restoration, and conservation of the status of both habitats and species.

The awarded LIFE IP Physis will be served as one of the major contributor for biodiversity conservation within protected areas. In addition to IP LIFE project there is the Structural Funds (SF) for the protection of the Natura 2000 areas.

In order to assess the effectiveness of measures on species and habitat types of specific projects, there is a need for holistic monitoring and assess and evaluation of indicators specified.

Section III. Assessment of progress towards each national target

Using the template below, please assess the level of progress made towards each of your country’s national targets or similar commitments. The template should be replicated for each national target. If your country has not set national targets please use the Aichi Biodiversity Targets.

III. Assessment of progress towards each national target
<p>Target</p> <p>National biodiversity strategy is being revised and adoption will be by House of Representatives in order to direct implement measures and actions. Implementation of measures to enhance nature and biodiversity as described in the Strategy refers to all ecosystems marine and terrestrial.</p>
<p>Category of progress towards the implementation of the selected target:</p> <p> <input type="checkbox"/> On track to exceed target <input checked="" type="checkbox"/> On track to achieve target <input type="checkbox"/> Progress towards target but at an insufficient rate <input type="checkbox"/> No significant change <input type="checkbox"/> Moving away from target <input type="checkbox"/> Unknown </p>
<p>Additional information</p> <p>Progress towards National Targets has been attained through projects for restoration and conservation of habitats and species projects founded mainly through the LIFE programme; Monitoring and assessment of the conservation status of species and habitat types of Community Interest Art. 17 of the Habitats Directive and Art. 12 of Birds Directive; monitoring for river basement management plan; managed of protected areas; other on-going research efforts (i.e. MAES);</p>
<p>Level of confidence of the above assessment</p> <p> <input type="checkbox"/> Based on comprehensive evidence <input type="checkbox"/> Based on partial evidence <input type="checkbox"/> Based on limited evidence </p>
<p>Adequacy of monitoring information to support assessment</p> <p> <input type="checkbox"/> Monitoring related to this target is adequate <input checked="" type="checkbox"/> Monitoring related to this target is partial (e.g. only covering part of the area or issue) <input type="checkbox"/> No monitoring system in place <input type="checkbox"/> Monitoring is not needed </p>

Please describe how the target is monitored and indicate whether there is a monitoring system in place

The monitoring system in place is the Natures Directive under Article 17 and 12 of the Habitat Directive and Birds Directive respectively. Monitoring systems are in place for the Water Framework Directive (WFD) and Marine Strategy Framework Directive (MSFD) as well.

Relevant websites, web links and files (Please use this field to indicate any relevant websites, web links or documents where additional information related to the monitoring system can be found)

<https://cdr.eionet.europa.eu/cy/eu/art17/>

<https://cdr.eionet.europa.eu/cy/eu/art12/>

<https://cdr.eionet.europa.eu/cy/eu/wfdart8/> and <https://cdr.eionet.europa.eu/cy/eu/wfdpom2018/>

https://cdr.eionet.europa.eu/cy/eu/msfd_mp/

Section IV. Description of the national contribution to the achievement of each global Aichi Biodiversity Target

Using the template below, please describe your country’s contribution towards the achievement of each global Aichi Biodiversity Target. This template should be replicated for each of the Aichi Biodiversity Targets.

For Parties whose national targets are identical to the Aichi Biodiversity Targets, some of this information may be captured in sections II and III above. Please provide additional descriptions of your country’s national contribution to the achievement of each global Aichi Biodiversity Target.

IV. Description of national contribution to the achievement of each global Aichi Biodiversity Target
Aichi Biodiversity Target 1, 2, 3...
<p>Please describe how and to what extent your country has contributed to the achievement of this Aichi Biodiversity Target and summarize the evidence used to support this description:</p> <p>Target 1: <i>By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.</i></p> <p>CY Achievements: Awareness of the value of biodiversity is very important and there are campaigns towards awareness that carried out from competent authorities, via projects (i.e. LIFE and Interreg etc.), and other relevant sectors and stakeholders. Competent authorities along with other stakeholders (including NGOs) organized awareness events (e.g. Environment Day, Wetland Day) throughout the island in order to stimulate public interest and enhance people's understanding of nature. These events include seminars, workshops, networking, press releases, reports, journals etc..</p> <p>Target 2: <i>By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.</i></p> <p>CY Achievements: Biodiversity values have been integrated into other strategies and other sectoral and cross sectoral policies. There has been progress in the areas of agriculture and town planning.</p> <p>Protections of nature are through Rural Development Plan (RDP), Fisheries Funds (FF), Cohesion Funds (CF), National Funds (NF), and contribute towards conservation and protection of biodiversity. In addition measures for Natura 2000 areas are in place through, LIFE and Interreg projects as well as national funds. A study developed indicated measures for habitats and species, for the connectivity of the areas, for awareness, for management and implementation of the provisions of the Natures directives. In river basin management plans there were actions and measures within and outside Natura 2000 areas (agri environmental measures).</p> <p>Regarding ecosystem services, Cyprus has carried out a number of studies to map ecosystems and assess ecosystem services. As a result, a road map was developed and ecosystems were mapped, and ecosystem services were described. In addition drivers of change were identified as well as indicators. A case study was developed for aquatic ecosystems (2 wetlands and 2 rivers). The Ecosystem Services Accounting will be developed through the IP Physis projects.</p> <p>Target 3: <i>By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic</i></p>

conditions

CY Achievements: Subsidies that are harmful to biodiversity are assessed and try to be eliminated. There are regular controls and checks from competent authorities in order to evaluate and reform harmful subsidies and negative impacts on biodiversity. There is a close cooperation between competent authorities in order to develop/promote and apply positive incentives through actions and measures for farmers and other stakeholders.

Targets 4: *By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits*

CY Achievements: Cyprus developed a sustainable development strategy that was published in 2010.

Green economy: Promotion of the Green Economy requires the creation of favorable conditions through the adoption of relevant legal regulations, policy development in the individual sectors and the creation incentives for business, industry and the general public, with the main objective the transition from an economy based exclusively on resource usage and depletion and environmental destruction, to a green, competitive resource efficient economy, with low carbon emissions. The main parameters promoted through the different environmental policies include: Investing in key natural resources; Incentives for increasing efficiency in the use of resources, enhancement of productivity, reduction of waste and energy consumption and allocation of resources in accordance with their highest use value; Market and regulatory measure promotion, such as environmental taxes, cancellation of harmful subsidies, mobilization of public and private financial resources, investment in green jobs and support of green innovative technologies; Opportunities for innovation through policies that enable strong new ways to tackle environmental problems; Creating new markets by stimulating demand for green technologies, goods and services, creating opportunities for new employment opportunities, and Improvement of Governance and encouragement of Private Sector Engagement.

In addition there is a close cooperation with private sector, however there is not any initiatives concerning funds for biodiversity projects. Saying that sustainable production and consumption is taken into consideration in order to minimize impacts on natural resources.

Target 5: *By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.*

Cyprus proceeds with designations of 34 of SCIs to SAC. Protected areas of the Natura 2000 Network have management plans that aiming the protection of habitats and species. Conservation measures are in place in order to prevent natural habitats loss. Is well mentioned that forests is managed only for biodiversity. Efforts are in place in order to reduce degradation and fragmentation of habitats.

Target 6: *By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits*

Marine Strategy Framework Directive (MSFD) establishes a legal framework for the protection and management of European seas and ensures their long-term sustainable use. The main objective of the Directive is to achieve and/or maintain Good Environmental Status (GES) by 2020, and ensuring sustainable harvesting of fish stocks.

Target 7: *By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity*

Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. Agriculture is characterized by small agroecosystems that are mainly maintained and host high biodiversity. Forest is managed only for its biodiversity values and is not for commercial use.

Target 8: *By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity*

Water and soil protection is regulated with the granting of permits for waste disposal. Environmental permits contain specific conditions, depending on the type of each establishment, for the sound management of liquid and solid waste and its controlled disposal in the environment.

River Basin Management Plans: The River Basin Management Plans (2015-2021) have the overall objective to reduce discharges of nitrogen into the aquatic environment.

Target 9: *By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment*

Invasive Alien Species (IAS) Regulation transposes into National Law 120(I)/2019. Case studies for pathways, controlled and eradication are in place for IAS.

Target 10: *By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning*

Anthropogenic pressures on vulnerable ecosystems are identified and measures are established in order to minimize anthropogenic pressures (e.g. aquatic ecosystems).

Target 11: *By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes*

Management measures for Natura 2000 sites have been prioritized and financed for the period 2016-2021. Protected areas (Natura 2000) are served as a cornerstone for biodiversity. Conservation measures are established in some areas (coastal habitats). Protected areas in Cyprus consist mainly of mountain and freshwater ecosystems (about 80% is forest land and freshwater ecosystems). The EU's Natura 2000 network ensures conservation of biodiversity in those areas as well as outside the network. Programmes such as LIFE were implemented in mountain ecosystems (e.g. Troodos National Forest Park), where concrete measures and actions were achieved for habitats restoration (e.g. Pinus nigra) and species conservation. Action plans are planned for protected areas (habitats and species) in order to ensure long term conservation of mountain ecosystems and their biodiversity. Measures implemented for conservation and restoration of habitats and species, ensure good structure and function of ecosystems, and enhance their capacity to provide benefits and services.

Target 12: *By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained*

Projects on forest state-owned land have been carried out which contribute to improving the conditions for endangered species. Measures are established for improving threatened and rare species status.

Target 13: *By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity*

There are ongoing studies for cultivated plants (e.g. local varieties of vegetables). Measures are in place for encouraging farmers to use local varieties and breeds.

Target 14: *By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.*

There are ongoing studies for mapping and assessment of ecosystems services. Several studies develop regarding ecosystems and their services. The main ecosystem categories were characterize and according to bibliography there services were describe.

Target 15: *By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification*

Actions and measures are already taken for climate change mitigation and to combat desertification. Measures for restoration of habitats and habitats for species are taken, especially for habitats and species that are facing major pressures and threats.

Target 16: *By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.*

Nagoya Protocol has been implemented through the EU Regulation on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization in the Union. The Regulation itself entered into force in 2014 and the Implementing Regulation entered into force in 2015.

Target 17: *By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan*

National Biodiversity Strategy was developed and implementation will be in force early 2020. Action plan include 13 targets and 80 measures. Measures and actions refers to three objectives of CBD- the conservation of biodiversity (e.g. through protected areas of Nature sites – Birds and Habitats Directives), sustainable use of its components and share and equitable benefit of genetic resources.

Target 18: *By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective*

participation of indigenous and local communities, at all relevant levels

-Not indigenous communities. Traditional practices in agriculture are really important and there is an effort to maintain those because there are very important for biodiversity.

Target 19: *By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied*

Mapping and assessment of the terrestrial ecosystem and their services, an assessment of their economic value, as well as promotion of integration of these values in the national accounting and reporting systems should be developed in next few years.

Target 20: *By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties*

Resource mobilization for strategic goals is in place and increase (LIFE IP Physis). Funding through cohesion and structural funds and well as Life and Interegg financial instruments are in place regarding biodiversity. NBSAP also responds to the need to fill knowledge gaps on biodiversity, especially in the context of the marine environment, in animal species, to mobilise resources for implementing effective conservation action, and to raise awareness on valuing the importance of biodiversity. Additionally resource mobilization are in place for improving national capacity in all fields of enforcement, such as site management, monitoring as well as research and development.

Based on the description of your country's contributions to the achievement of the Aichi Biodiversity Targets, please describe how and to what extent these contributions support the implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals:

In Cyprus, national Law 4 (III)/1996 ratified the Convention of Biological Diversity (CBD) along with national laws N. 153/ (I)/2003 and 152(I)/2003, ratifying the Habitats and Birds Directives, form the cornerstone of the conservation of habitats and wildlife. Under the provisions of Nature Directives, Cyprus designated 40 Sites of Community Interest (SCIs of which 34 are SAC) and 30 Special Protected Areas (SPAs) in order to safeguard and restore threatened habitats and species and protect ecosystems. The percentage of terrestrial key biodiversity areas covered by protected areas is up to 29% per cent of the area under the effective control of the Republic of Cyprus. Mountain ecosystems consist of high biodiversity and political will should increase in order to meet the SDG and targets.

Protected areas in Cyprus consist mainly of mountain and freshwater ecosystems (about 80% is forest land and freshwater ecosystems). The EU's Natura 2000 network ensures conservation of biodiversity in those areas as well as outside the network. Programmes such as LIFE were implemented in mountain ecosystems (e.g. Troodos National Forest Park), where concrete measures and actions were achieved for habitats restoration (e.g. Pinus nigra) and species conservation. Action plans are planned for protected areas (habitats and species) in order to ensure long term conservation of mountain ecosystems and their biodiversity. Measures implemented for conservation and restoration of habitats and species, ensure good structure and function of ecosystems, and enhance their capacity to provide benefits and services.

Section V. Description of the national contribution to the achievement of the targets of the Global Strategy for Plant Conservation (completion of this section is optional)

Using the template below, please describe your country's contribution towards the achievement of the targets of the Global Strategy for Plant Conservation. This template should be replicated for each of the 16 targets of the Global Strategy for Plant Conservation.

<p>V. Description of the national contribution to the achievement of the targets of the Global Strategy for Plant Conservation</p>
<p>Does your country have national targets related to the GSPC Targets?</p> <p><input checked="" type="checkbox"/> Yes. Please provide details on the specific targets below:</p> <p>Achievements for plant conservation are the following: Cyprus participate in CARE MEDIFLORA project for the Conservation Actions for Threatened Mediterranean Island Flora with ex situ and in situ joint actions</p> <p>Additionally though the LIFE PLANT-NET CY, plant Micro-Reserves was created in Cyprus, to improve the conservation of the species <i>Arabis kennedyae</i>, <i>Astragalus macrocarpus</i>, <i>Centaurea akamantis</i>, and <i>Ophrys kotschyi</i>.</p> <p>or:</p> <p><input type="checkbox"/> No, there are no related national targets</p>
<p>Please provide information on any active networks for plant conservation present in your country.</p> <p><Text entry></p>
<p>Please describe the major measures taken by your country for the implementation of the Global Strategy for Plant Conservation. (Parties can report on actions taken to implement these targets if they are not covered in sections II, III or IV)</p> <p>In Cyprus there is in situ and ex situ conservation activities for plant species.</p>
<p>Category of progress towards the target of the Global Strategy for Plant Conservation at the national level:</p> <p>GSPC Target 1, 2, 3...</p> <p><input checked="" type="checkbox"/> On track to achieve target at national level <input type="checkbox"/> Progress towards target at national level but at an insufficient rate <input type="checkbox"/> No significant change at national level</p> <p>Please explain the selection above:</p> <p>The Department of Forests in cooperation with Agriculture Research Institute maintain a plant seed bank of all plant species identified in Cyprus including cultivate and the wild relatives of plant species. There is an on-going in situ and ex situ conservation action for plants and actions are taken especially for the endemic, rare and endanger species.</p>
<p>Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description:</p> <p>During the Care Mediflora project in Cyprus an in situ and ex situ conservation took place successfully for 10 endangered and endemic flora species. Additionally during Plant Net CY LIFE projects in situ and ex situ conservation took place for 4 endemic flora species.</p>

Section VI. Additional information on the contribution of indigenous peoples and local communities (completion of this section is optional)

Using the template below, please provide any additional information on the contribution of indigenous peoples and local communities to the achievement of the Aichi Biodiversity Targets if not captured in the sections above

VI. Additional information on the contribution of indigenous peoples and local communities to the achievement of the Aichi Biodiversity Targets if not captured in the sections above

Please provide any additional information on the contribution of indigenous peoples and local communities to the achievement of the Aichi Biodiversity Targets if not captured in the sections above.

Enhancement of local communities' involvement in conservation, sustainable use and benefit sharing on genetic resources needs to be achieved. At the current competent authorities are achieving part of Aichi Targets especially for the conservation of protected areas, however there step forwards for local communities awareness and involvement in biodiversity protection issues.

Section VII. Updated biodiversity country profiles

Please review and update your country's biodiversity profile currently displayed on the clearing-house mechanism. Biodiversity country profiles provide an overview of information relevant to your country's implementation of the Convention.

VII. Updated biodiversity country profile (Please review and update the text currently displayed at <https://www.cbd.int/countries¹>)

Biodiversity facts

Status and trends of biodiversity, including benefits from biodiversity and ecosystem services and functions:

The climatic, geographical and geological characteristics of Cyprus and its position between the three continents, together with long anthropogenic impact on land (agriculture), have resulted in rich biodiversity.

Cyprus has a rich biodiversity, with diverse ecosystems and wildlife in both terrestrial and marine environments and is characterized as a biodiversity hotspot. Its insular character, the varied climate, geology and topography along with the long history of human activities dating back to 8200 AD, have shaped the landscape and created a wide variety of natural, semi-natural and anthropogenic habitats where a large number of plant and animal species prosper. In Cyprus, as in the rest of Europe, agriculture dominates much of the landscape, extending over half of the island's territory and comprises mainly of irrigated and dry crops. Small agricultural fields with a diversity of arable land and tree crops, such as the traditional olive groves, carob trees and vineyards, create a mosaic of landscapes, ideal for many wildlife species, particularly birds and reptiles. Much of this agricultural land consists of areas farmed in a traditional (non-intensive) way. Very often agricultural land, especially on mountains, alternates with fallow or abandoned land, colonized by shrubby or phrygana, which further diversifies habitat conditions.

The flora of Cyprus comprises 1649 indigenous taxa (species and subspecies), of which 141 are endemic.

Main pressures on and drivers of change to biodiversity (direct and indirect):

Main pressures on and drivers of change to biodiversity in Cyprus are land use changes, natural system

¹ Note: If the online reporting tool is being used, the text of the current biodiversity profile will be displayed. A time stamp will be added to indicate the date when the update was published.

modifications through development projects (mainly touristic), infrastructure, agriculture (both intensification and abandonment), mining, climate change, pollution, and invasive species. Habitat destruction, fragmentation and losses are also recognized as an ongoing pressure. Even in most protected areas, a variety of human activities have been recorded. Climate change, drought, water scarcity and desertification have been increasingly identified as a serious threat, especially to coastal and freshwater ecosystems in Cyprus. According to the 2012-2018 national report under Article 17 of the Habitats Directive, natural system modifications and urbanization along with residential/commercial development constitute the main pressures and threats for habitats and species. The tourism sector exerts significant pressure on land uses (land use change) and natural resources and is intrinsically linked with N2K areas. The high demand for numerous small and large development projects, especially those within protected sites (Natura 2000 Network), in pristine natural areas such as wind and solar farms, roads, golf resorts, marinas, desalination plants, dams/reservoirs, etc., make biodiversity protection quite challenging. Pressures on the coastal zone (protected and non-protected areas), are high due to the insular character of the island, as well as in the aquatic ecosystems (wetlands and rivers) due to the high demand of water and drought that occur frequently on the island. Additionally Invasive Alien Species, especially plants, are widely spread thus threatening ecosystems (habitats and species). Furthermore climate change as well as land modification are characterized as being among the most crucial pressures for Cyprus biodiversity.

Land use change, whether for urban and industrial expansion, agriculture (including impact by input of nitrogen and phosphorus, and intensification), fragmentation and land degradation, infrastructure, and tourism facilities, is undoubtedly the main cause of biodiversity loss in Cyprus. Such activities result in the loss, degradation or fragmentation of habitats, and currently affect all habitat types and species

Measures to enhance implementation of the Convention

Implementation of the NBSAP:

The National Biodiversity Strategy aims to: a) improve knowledge of biodiversity b) protect and restore biodiversity through protected areas c) control and eradicate IAS d) implement climate change adaptation measures and measures for combating desertification e) implement measures for subsidies in agriculture section f) ensure the implementation and enforcement of biodiversity legislation; g) enhance awareness involving local communities; h) mobilize of resources (including through innovative mechanisms) and enhancing capacities. The Strategy contains 13 strategic objectives and 80 Targets. Specific actions and indicators for the Strategy will be developed at a later stage (during the implementation process).

Overall actions taken to contribute to the implementation of the Strategic Plan for Biodiversity 2011-2020:

Actions were taken from competent authorities along with NGOs in order to protect and conserve biodiversity (ecosystems, habitats and species and genetic diversity) with aid of national and EU funds. The major projects were through LIFE, Interreg, and other funding tool.

Support mechanisms for national implementation (legislation, funding, capacity-building, coordination, mainstreaming, etc.):

The support mechanism for national implementation are through the Legislation on Nature issues both Habitats and Birds Directives (Nature's Law 153 (I)/2003 and 152 (I)/2003) along with Forest and Common Agriculture policy, Water Legislation, Marine Strategy and other Conventions (Combat Climate Change and Combat Desertification etc.) that are in place, through funding from national and EU funding, a LIFE project for capacity building, as well as with coordination of the authorities and mainstreaming of the Strategy.

Mechanisms for monitoring and reviewing implementation:

Development of indicators, as a support mechanism for monitoring and evaluating the effectiveness of measures taken to implement the Strategy.
