



REPUBLIC OF SLOVENIA

MINISTRY OF THE ENVIRONMENT AND SPATIAL PLANNING

Fifth National Report to the Convention on Biological Diversity – Executive Summary

June 2015

Executive Summary

Biodiversity is important for Slovenia for various reasons. It is the cornerstone of life and therefore its importance for the society and state is invaluable. **Ecosystem services** in Slovenia have not yet been systematically mapped and economically evaluated, but several studies dealing with particular areas have been carried out. During the reporting period, the awareness of the importance of vital ecosystems for the benefit of citizens has increased at state and local levels. Despite that fact, in many cases decisions were not made in accordance of that awareness. Understanding of the importance of vital ecosystems is increasing at the European Union level (Slovenia has been a EU Member State since 2004). The recent development shows that decision makers are changing their view and ecosystem approach is being integrated into relevant sectoral policies.

Regarding the **status of species**, data on the population trends are relatively modest. On the basis of the data available, it could be concluded that the overall situation has deteriorated over the reporting period. Due to the great number of Natura 2000 sites and obligations related to them, the attention was focused on the status of the species and habitats of European importance. Amphibians, reptiles and some arthropods (crustaceans, butterflies, beetles and dragonflies) have the most unfavourable conservation status. The data for birds show that there is a considerable volume of species with negative population trends and the proportion of species with unknown population trends is problematic. Of the three large carnivores in Slovenia (lynx, brown bear and wolf), the conservation status of the bear is favourable while the status of the lynx is a matter of concern since its population has declined considerably over the last years. There have been very few reintroductions of species in Slovenia. As an example of good practice we may mention the project on the repopulation of the marble trout (*Salmo marmoratus*) in the Soča river basin and the results of ichthyological research show that its status is improving. More than 10% of all vascular plants (app. 3200 species are known in Slovenia) are threatened. Among **ecosystems**, the estimated conservation status is worst in freshwater ecosystems and grassland habitat types. The status of forest habitat types is still relatively favourable despite the increasing pressures on forest areas. The management of forests in Slovenia is mostly sustainable, which is reflected in the relatively good status of forest habitat types. The most threatened are alluvial and other lowland forests and some specific small-area forest habitat types. It is a cause for concern that many grasslands have been turned into intensively cultivated agricultural areas. On the other hand, overgrowing is a general problem affecting biodiversity in almost all parts of the country.

The **threats** to biodiversity in Slovenia remain largely unchanged in this reporting period. More expressed are the negative impacts of spreading of invasive alien species and climate change. All key causes are linked to human activities which cause the loss, fragmentation and deterioration of ecosystems, habitats and species' populations. The pressures of urbanisation are still acute in freshwater ecosystems, marine and coastal ecosystems, underground ecosystems and extensive landscape ecosystems. Pressures on biodiversity have increased due to the unsustainable management of natural resources and human interventions, particularly in lowland areas of the country. Climate change and the spreading of invasive species are also consequences of human activities and their impact on biodiversity in some ecosystems in Slovenia has been more intensive in this reporting period. Among the outstanding pressures and threats recorded are those related to agriculture and the anthropogenic changes of water ecosystems which is reflected in the unfavourable status of habitat types and species associated to these ecosystems. The most

important threat to agricultural landscape ecosystems is intensive agriculture with the increased use of fertilisers and biocides which impoverishes species and landscape diversity. The second reason is the abandoning of traditional agriculture in economically less interesting areas and the overgrowing of that areas into forests. Pressure to water and wetland habitat types also continued during the reporting period. The main factors of threat are unsustainable water management due to the acquisition of new areas for urbanisation and agriculture and pollution. The impact of climate change is becoming more evident in freshwater ecosystems, since dry periods are becoming more frequent and last longer. In relation to the conservation of biodiversity and landscape diversity in mountain areas, the problem of overgrowing of alpine meadows due to abandonment of traditional use is still evident. Tourism in mountain areas represents an ongoing and increasing threat. Key factors that threaten the marine and coastal ecosystems remained relatively unchanged in this reporting period (degradation and fragmentation of habitats due to urbanisation, transport, tourism, intensive mariculture, etc.). The quality of seawater has improved owing to the construction and operation of new wastewater treatment plants. Underground ecosystems are threatened due to disturbances in the underground and because of unsuitable human activities on the surface that influence underground ecosystems (e.g. pollution). A special problem is that a great deal of underground caves remain unmanaged.

Regarding the use of genetic resources for food and agriculture, the globalisation of agricultural market is the biggest threat to the genetic diversity of domestic breeds and sorts. The practice of introducing new breeds and sorts that are better adapted to intensive agriculture is widespread in the country. **Alien species** have been recognised as a serious threat to biodiversity in Slovenia. Invasive plants are spreading fast along the watercourses and traffic routes. The problem is particularly acute in wetlands and along big rivers (Sava, Drava, Mura) with extensive areas where the original vegetation has been completely replaced. Invasive species have also been recognised as a threat in almost all protected areas in Slovenia. Unsustainable tourism and recreation are also a serious threat to these areas. Unauthorised use of motor vehicles is another important pressure on natural areas. The role of **climate change** is becoming more important as a cause of threat to biodiversity. Over the reporting period, Slovenia faced a number of extreme weather events. Warm winters are becoming more frequent which also has an effect on biodiversity (e.g. changed hibernation patterns, spread of thermophilic species, etc.). **Human population growth** is not a direct threat to biodiversity in Slovenia like in many other places in the world. Demographic prognosis for the country are not favourable (the share of population aged over 65 is increasing). Despite that fact, we can expect an increased pressure on natural areas and the deterioration of biodiversity as a consequence of loss of ecosystem diversity. In the next reporting period we can expect that the loss and fragmentation of habitats due to urbanisation, construction of traffic routes and energy facilities and intensive agriculture will continue. The spreading of invasive alien species will remain an important threat factor. A lack of predators in the forests and invasive species may cause serious problems in the natural regeneration of forests. The increasing demand for biomass could become one of the factors that pose a considerable threat to biodiversity in forests of Slovenia. The projections of climate change for the next decades show that we will face extreme weather conditions more frequently than in the past. The north-west, Karst and coastal regions will be the most exposed to extreme weather conditions (drought, torrential rain, hail, hurricane winds etc.).

In Slovenia, biodiversity is integrated into all fundamental **strategies, plans and programmes** at state level, as well as into various sectoral strategic documents. The integration of environmental

requirements into all policies and activities is essential for the enforcement and facilitation of sustainable development. Nature conservation planning in the Republic of Slovenia is implemented through the **National Nature Conservation Programme (NNCP)**. The first NNCP was adopted as a part of a wider National Environment Programme, which expired in 2014. NNCP determines the specific »operational programmes« that contribute to achieving the goals of biodiversity conservation. These programmes are: Operational programme – strategy for biodiversity conservation with the management for Natura 2000 sites, Operative programme - strategy for management of large carnivores and Operative programme – strategy for management of invasive alien species. The obligation to prepare a **National biodiversity strategy (NBS)** has been fulfilled with its adoption for the period 2002 – 2012. The strategy defined a set of specific goals and directions for the harmonised implementation of actions that contribute to the achievement of the three fundamental goals of the Convention. The strategy anticipated that its goals will be reached through the implementation of its action plan, which has not been adopted yet. Owing to a high share of Natura 2000 sites in Slovenia (37.16% of the territory), **Natura 2000 Sites Management Programme** is a key document for the conservation of biodiversity. A fundamental strategic document at the national level, i.e. **the Development Strategy of Slovenia 2014 – 2020**, states that changes in the economy and in the society are directed to increase the prosperity of generations in compliance with environmental limitations and care for people's health. The **National Programme of Reforms** is a mid-term plan of the government for priority actions and projects directed towards the implementation of **Strategy Europe 2020**. The programme states that a high level of biodiversity and vital ecosystems will be ensured by effective management of protected areas and accelerated implementation of actions in Natura 2000 areas. **The National Development Plan 2007 – 2013** lists the conservation and sustainable use of biodiversity among its core objectives. **The Rural Development Programme** is a strategic document under the auspices of which agri-environmental measures are implemented. The objective of these measures is to introduce the concepts of sustainable agriculture and conservation of natural resources and biodiversity. The **Operational Programme for the Implementation of European Cohesion Policy 2014-2020** is a special investment priority devoted to the conservation and restoration of biodiversity of soils and promotion of ecosystem services.

At sectoral level, biodiversity is integrated in all key supporting activities. **Forestry** in Slovenia ensures the multifunctional management of forests in line with environment protection, natural values and monitoring of forest ecosystems. **Wild game management** provides for ecological, social and economic functions of wild game species and their habitats. It comprises the planning, conservation, sustainable use and monitoring of wild game. **Fishing** in Slovenia is carried out at sea and inland waters, while commercial fishing is only carried out at sea. The strategic vision of the fisheries sector is to achieve sustainable development of the sector in which the fishing effort (eg. the capacity of the fishing fleet) and aquaculture will be coherent with the available resources.

In 2011, the first Water Management Plan for the water catchment area of the Danube river and the Adriatic sea was adopted. The document provides a comprehensive analysis of the implementation of environmental goals and the use of water and water management. The **National Reform Programme for the Lisbon Strategy** lists among its key long term directions the halt of biodiversity loss and sustainable use of its components. The programme recognises the importance of biodiversity as an advantage and opportunity for further economic development in Slovenia. The **Slovenian Industrial Policy** recognises the necessity to take into account the limitations of natural

resources in industrial development planning. **Tourism development vision** is based on sustainable development principles. It is intended to raise awareness about the importance of conservation of biodiversity and nature and to promote the development of sustainable tourism. The vision for activities in **energy sector** in Slovenia is to create conditions for the transition to a low carbon society. **National Action Plan for renewable sources of energy 2010 – 2020** provides that Slovenia should reach at least 25% share of renewable energy in its final gross energy consumption. Biodiversity objectives should be taken into consideration in the implementation of these activities. The overall objective of the **National Transport Development Programme** is to provide conditions for the development of sustainable mobility. Nature and biodiversity are included in these conditions. The components of the Nature Protection Programme are taken into account in **spatial planning** and the use of natural resources. The Nature Protection Programme and the **National Spatial Plan** should be aligned. A comprehensive environmental impact assessment has to be carried out for plans and interventions that could have a significant impact on the environment and a cross-border environmental impact assessment has to be carried out for plans with cross-border impact.

Numerous measures and activities have been implemented during the reporting period that either directly or indirectly contributed to the conservation of biodiversity. The measures linked to the implementation of common EU legislation were implemented best. The implementation of almost one third of actions specified in the National Biodiversity Strategy 2002 – 2012 was not satisfactory and the implementation of approximately one half of the actions was good. Of all actions, only 15% contributed significantly to the conservation of biodiversity. In the areas not regulated at the EU level, there were considerably less actions carried out. Over the past decade, a new legislative and organisation system for nature protection has been established and all key regulations in the area of sustainable use of natural resources have been revised. At the level of planning and sectoral policies, the situation has improved significantly. However, problems arise at the level of implementation and compliance with regulations is weak. In 2004, Slovenia established the **Natura 2000** network which has been slightly increased in 2013 and now comprises over 37% of the national territory. This is an important achievement in the field of nature conservation, which brought greater account of nature protection in spatial planning and in the use of natural resources. The Operational Programme for the Management of Natura 2000 Sites imposes sectoral management measures on sectors according to their competences. In recent years, much has been done in the field of **management of populations of large carnivores**. Strategies and action plans were prepared for the bear, the wolf and the lynx. The Government has approved an action plan for sustainable management of the wolf population for the period 2013–2017, the draft strategy for the management of lynx for the period 2015-2025 is also being prepared. Numerous projects that provided important findings about large carnivores were carried out during the reporting period. The mainstreaming of biodiversity into legislative mechanisms and policies has improved over this reporting period, while the implementation of measures was less efficient. Certain impacts of **agriculture** have recently decreased, particularly with regard to the input of fertilizers and plant protection products. The conservation of native breeds and varieties can be estimated as positive and the situation has improved over this reporting period. The implementation of measures in the **forestry** sector can also be assessed positively, which is reflected in the relatively good conservation status of most forest habitats and species. In the field of **fisheries**, particularly over the last five years, a gradual progress has been achieved in integrating biodiversity conservation goals into sectoral policies. The involvement of nature conservation policies and actions plans in the field of **hunting** has improved in

recent years. Data show that the status of the species defined as wild game is favourable. Biodiversity conservation is not yet sufficiently integrated into **water management** and in practice there are many difficulties. Strategic directions in the fields of **industry, energy and transport** have not been achieved. Despite some measures aimed at improving the energy efficiency, the use of energy continues to increase. At the policy level, the preserved nature is often exposed as country's comparative advantage but in practice that has been poorly reflected in concrete policies and activities. Regarding the **spatial planning**, significant pressures on areas important for biodiversity conservation have been recorded during this reporting period. The situation in the field of **monitoring** has improved in recent years, however due to the fiscal crisis the lack of resources is a reason for concern. Monitoring is focused solely on the species of European importance. In relation to environmental information, an online Nature Conservation Atlas has been set up which allows public access to information on important nature conservation areas. Slovenia has not yet developed a national program to explore biodiversity. The lack of targeted action in the field of **research** is reflected in the modest support to biodiversity research projects. In the area of **outreach and communication**, strategic goals were not met. The activities were dispersed and mostly carried out at project level which does not guarantee their sustainability. Biodiversity Clearing House Mechanism (CHM) is poorly maintained. We cannot be satisfied with the situation in the field of **education** but improvements are possible. The situation is better at tertiary level, since the number of programs in the field of nature protection increased and are now available at all levels of study. The preparation and adoption of **management plans** for protected areas has been delayed mostly due to the complexity and scope of tasks. The national goal on the establishment of new **protected areas** (target by 2014: 22% of the national territory) has not been achieved, which is mainly due to decreased resources in the reporting period.

In Slovenia, nature conservation is generally a non-profit activity and its **financing** is ensured by the state and local communities in accordance with their respective powers. The system of financing of public service is carried out by the state budget. The creation of new protected areas is normally financed from budgetary resources. The European Regional Development Fund, the Rural Development Programme, the LIFE Programme, the Cohesion Fund, the EEA Financial Mechanism and the Norwegian and Swiss contribution are significant additional resources. Payments for ecosystem services in Slovenia have not yet developed and they represent a potential opportunity for financing of measures for the conservation of biodiversity. The "Business & Biodiversity" mechanism has not come to life in Slovenia yet. One of the main innovations introduced by the reform of the Common EU Agricultural Policy for the period from 2015 to 2020 is the higher volume of funds under agri-environmental and climate payments. These measures are expected to reduce the negative impacts of agriculture on the environment. The system of financing that would enable prompt filling of databases and their maintenance has not yet been established. Awareness-raising activities are to some extent part of the regular work of public institutions and public service operators working in the field of nature conservation in Slovenia. They are financed from the budget and other sources.

Development reports note that the **sustainable development** principle is gradually implemented in Slovenia while maintaining the weaknesses and imbalances in all three of its components (economic, social and environmental) and large energy intensity. Much remains to be done to raise awareness of consumers as they may accelerate the change in economic orientation.

Slovenia has yet to achieve the objective of the CBD on the establishment of a sufficient volume of **marine protected areas** (currently, 0.4% of the Slovenian sea is protected). Many measures to improve the status of a number of species have been implemented through programs of ecosystem conservation and management of some umbrella species, such as large carnivores. Ecosystems that provide essential services for the residents of the Republic of Slovenia are largely protected under sectoral legislation. Although many of these areas have not been primarily declared due to the conservation of biodiversity, they play a major role in the maintenance of vital ecosystems. Over the reporting period, total greenhouse gas emissions in Slovenia have reduced. Increase was only recorded in transport.

Slovenia signed the **Nagoya Protocol** in 2011 but has not yet ratified it. The implementation of the Protocol in the EU is governed by *Regulation (EU) No. 511/2014 of the European Parliament and of the Council 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*. Slovenia will implement the part of the Protocol on the obligations of users through this instrument. In the coming years it is likely that Slovenia will regulate the access to genetic resources.

The conservation of biodiversity in Slovenia has relatively low weight in comparison with other sectors. Due to the economic and financial crisis in this reporting period, we were faced with challenges in placing biodiversity conservation among other national priorities. It was necessary to achieve more goals with reduced resources and therefore we have not been able to give financial commitments that would be impossible to meet. The updated **national biodiversity strategy and action plan** (NBSAP) is currently in preparation. Compared with the previous biodiversity strategy, the proposed objectives are more focused on the implementation of the global targets. In 2014, a draft document has been prepared and the final strategy is expected to be adopted by the end of 2015.

Over the reporting period, Slovenia actively contributed to the achievement of the **Millennium Development Goals** by 2015 (goals 1, 7 and 8). Due to unfavourable fiscal situation in the country, official development assistance has decreased. Despite that fact, Slovenia was involved in many projects and programmes in developing countries by providing technical and human capacities, exchanges and training. Slovenia's contribution was mainly focused on development assistance in the field of environment in the countries of the Western Balkans. In addition to the Government institutions many NGOs are active in that area.

Due to the financial and economic crisis, which in the reporting period markedly affected Slovenia, the availability of public funds in the field of nature protection decreased. This was reflected in the reduced involvement of Slovenia in international forums. The realization of some obligations under ratified international treaties was limited (payment of membership fees, participation in meetings, project financing, etc.) and only the most urgent matters were covered.

Table: Mapping of updated NBSAP targets/objectives to Aichi targets

Draft updated NBSAP targets/objectives	Corresponding Aichi targets
Overall national target A: Improvement of conservation status of species and of their habitats	
<i>Detailed national target 1:</i> By 2025, the status of habitat types and species, including their genetic diversity will improve and/or will be maintained	5, 11, 12, 13, 15
<i>Detailed national target 2:</i> By 2025 agriculture, forestry, water management and fisheries sectors will increase inclusion of conservation of species and habitat types of national and wider (EU) importance into their plans and programmes	4, 6, 7, 8, 13
<i>Detailed national target 3:</i> By 2020 the invasive alien species and their pathways will be identified. By 2025, the invasive alien species and their pathways will be brought under control	9, 19
Overall national target B: Knowledge, understanding and awareness on biodiversity and its importance will increase at all levels of society	
<i>Detailed national target 4:</i> By 2020, a national program on research and monitoring of biodiversity will be established	1,2
<i>Detailed national target 5:</i> By 2025, the biodiversity will be a part of compulsory education programmes	1, 19
<i>Detailed national target 6:</i> By 2025, public will be adequately informed about importance of biodiversity	1, 19
<i>Detailed national target 7:</i> By 2025, promotion of biodiversity will increase and good practices that support it will be rewarded	1, 2, 18, 19, 20
Overall national target C: For conservation of biodiversity, the interdisciplinary and cross-sectoral cooperation and application of comprehensive approach will improve	
<i>Detailed national target 8:</i> By no later than 2025, the biodiversity values will be intergrated into relevant national and local strategies and decision making processess	2, 4, 16, 17
<i>Detailed national target 9:</i> By 2020, the existing protected areas and Natura 2000 sites will be preserved through efficient management	2, 5, 7, 8, 10, 11, 12, 13, 14, 15
<i>Detailed national target 10:</i> By 2025, traditional knowledge scientific research, inovations and new technologies will be involved into conservation of biodiversity	18, 19
Overall national target D: Stimulative financial incentives will be provided for biodiversity conservation	
<i>Detailed national target 11:</i> By no later than 2020, the subsidies and incentives harmful to biodiversity will be identified and removed	3, 20
<i>Detailed national target 12:</i> By 2025, a sustainable financial resources for research activities, programmes and projects that support conservation of biodiversity will be provided	3, 20