

ANNEX

**Matrix for the review of implementation of the programme of work on island biodiversity**

*This table can also be completed on-line at: <http://www.cbd.int/island/reports.shtml>*

**Party: ITALY**

<p><b>2020 Biodiversity Targets (“Aichi Targets”)</b> <i>(Text in bold above target is a synopsis of the target, for easy reference)</i></p>	<p><b>Progress/Obstacles</b></p>
<p><b><i>Strategic goal A. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society</i></b></p>	
<p><b>General awareness of biodiversity is achieved</b></p> <p>Target 1: By 2020, at the latest, all people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.</p>	
<p><b>Biodiversity is mainstreamed into development strategies and plans</b></p> <p>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.</p>	<p>The National Strategy for Biodiversity confirms Italy’s commitment to stop the loss of biodiversity and is a basic tool for integrating the key issues of biodiversity into national politics. The document stresses the need to strengthen and restore the resilience of ecosystems in order to ensure a steady flow of ecosystem services, that are essential for human well-being, the relationship between biodiversity and climate, focusing particularly on the role of ecosystems in mitigating and adapting to climate change, and the economic value of the benefits arising from biodiversity and ecosystem services and the costs of their loss.</p> <p>It is divided into 15 working areas (1. Species, habitat and landscape; 2. Protected areas; 3. Genetic Resources; 4. Agriculture; 5. Forests; 6. Inland waters; 7. Marine environment; 8. Infrastructures and transport; 9. Urban areas; 9 Health; 11. Energy; 12 Tourism; 13. Research and innovation; 14 Education, information, communication and participation; 15. Italy and biodiversity in the world).</p> <p>In the seventh working area, several priority targets are identified with the aim of protecting and promoting a sustainable use of marine and costal habitats, in the framework of main national and international commitments and legislation (e.g., Dir. no. 2008/56/CE, 2002/413/CE), in particular by applying the principles of Integrated Coastal Zone Management, carrying out, for example, the Italy CAMP (Coastal Area Management Programme) Project or enforcing the marine protected areas system; from this point of view the implementation of the Strategy could have very good effects on conservation of island biodiversity, promoting at the same time sustainable development. <u>The National Strategy has not a specific section dedicated to island biodiversity.</u></p> <p>The Ministry of Agriculture and Forestry Politics (MIPAF) has elaborated the National Plan on Agricultural Biodiversity (PNBA) whose main objective is to supply guidelines for the conservation and valorization of genetic and biological resources in agriculture according to national and international commitments . To this end, a Permanent Committee for genetic resources has been established and is coordinated by the Ministry of Agriculture and Forestry Politics. A significant portion of agrobiodiveristy is stored in Italian islands ,</p>

<b>2020 Biodiversity Targets (“Aichi Targets”)</b> <i>(Text in bold above target is a synopsis of the target, for easy reference)</i>	<b>Progress/Obstacles</b>
	<p>yet no precise reference is found on the PNBA (e.g., production <i>Capparis spinosa</i> on Eolian islands , conservation of <i>Brassica macrocarpa</i> on Egadi islands ).</p> <p>Since 2008 the Italian ministry of Foreign Affairs has funded, through UNEP - Directorate General for Development Cooperation (DGCS), the GID initiative (Global Island Database - <a href="http://gid.unep-wcmc.org/">http://gid.unep-wcmc.org/</a>) , with strong links to the Global Islands Network (GIN), as well as IUCN's Species Survival Commission's (SSC) Invasive Species Specialist Group (ISSG) and the Pacific Ecosystems at Risk (PIER) project. The GID reflects five of the themes important for islands, as identified by the Island Biodiversity Programme of Work (IBPoW) of the Convention on Biological Diversity (CBD), namely biodiversity, climate change, invasive species, pollution and sustainability.</p> <p>Italy supports and takes part to the activities of the group of experts on “Island Biodiversity” in the framework of the Bern Convention.</p>
<p><b>Biodiversity incentives are used in policy (negative avoided, positive applied)</b></p> <p>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.</p>	
<p><b>Sustainable (biodiversity-friendly) production and consumption are in place</b></p> <p>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</p>	
<p><b><i>Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use</i></b></p>	
<p><b>Rate of loss of all habitats are at least halved, fragmentation and degradation reduced</b></p> <p>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</p>	
<p><b>Fish, invertebrates and aquatic plants are sustainable harvested</b></p> <p>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.</p>	<p>See Council Regulation 1224/2009/EC and related activities of the Ministry of Agricultural, Food and Forestry Policies, the "Italian System for Fisheries and Aquaculture", the Memorandum of Understanding between MIPAAF and FIPSAS, and between MIPAAF and Enelpesca. (eg Decree 27th of April 2010 - Ministry of Agricultural, Food and Forestry Policies, - Plan of adjustment of fishing effort of the seine fleet authorized for the fishing of bluefin tuna in Italy).</p> <p>Sardinia: Regional Law n. 3/2006, Art. 6 - Measures to improve the sustainability of marine fisheries in the waters facing the territory of Sardinia: temporary suspension (2010) for the units qualified for the trawling and/or steering wheel fishing systems [Decree No. 2000/DecA/76 of 30.07.2010].</p>

<p align="center"><b>2020 Biodiversity Targets (“Aichi Targets”)</b> <i>(Text in bold above target is a synopsis of the target, for easy reference)</i></p>	<p align="center"><b>Progress/Obstacles</b></p>
<p><b>Areas under agriculture, aquaculture and forestry are managed sustainably</b></p> <p>Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity</p>	<p>With over 56% of the population in the 27 Member States of the European Union (EU) living in rural areas, which cover 91% of the territory, rural development is a vitally important policy area (<a href="http://ec.europa.eu/agriculture/rurdev/index_en.htm">http://ec.europa.eu/agriculture/rurdev/index_en.htm</a>). Farming and forestry remain crucial for land use and the management of natural resources in the EU's rural areas, and as a platform for economic diversification in rural communities. The strengthening of EU rural development policy is, therefore, an overall EU priority. This is particularly true for the two main Italian islands of Sicily and Sardinia, and for many other inhabited islands. In applying the Council Regulation (EC) No. 1698/2005, the Island regions of <b>Sicily</b> and <b>Sardinia</b> are promoting local actions aiming to improve the competitiveness of the agricultural and forestry sector; improve the environment and the countryside; improve the quality of life in rural areas and encouraging diversification of the rural economy. Rural Development policy has considerable potential to tackle the biodiversity challenge on islands. The afforestation measures under the current regulation are among the most important measures affecting forestry. In this aspect, it would be advisable to avoid that funding could be allocated to plantations of non-native or alien and sometimes invasive species, especially on islands. Nevertheless, the report 'Could do Better, How is EU Rural Development Policy delivering for biodiversity?' produced by BirdLife International and the RSPB finds that only a very small proportion of current Rural Development spending is benefiting Europe's nature. Adding, that any potentially harmful investments such as irrigation expansion, drainage and extension of road networks, are still funded without appropriate safeguards.</p>
<p><b>Pollution and eutrophication are contained and controlled</b></p> <p>Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.</p>	
<p><b>Invasive alien species identified, priority species controlled/eradicated, pathways contained</b></p> <p>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</p>	<p>In addition to its two main islands (Sicily and Sardinia) Italy has a plethora of islands and islets. During the more recent years, considerable progress has been archived on the knowledge of the alien biota (plants and animals) on the two main island of Sicily and Sardinia, and on many Italian small islands, but yet part of them is left un-investigated. Surveying small island is labour and cost intensive, and weather conditions may impede monitoring and surveying for part of the year.</p> <p>With concern to the knowledge of alien plant presence and distribution, a team of botanists from the Italian Botany Society has been working on a national catalogue of the non-native vascular plant species since 2002. In 1999-2000 a pilot project of the alien flora of Sardinia was funded by the Italian Ministry for the Environment. More or less in the same timeframe, the alien flora of the island of Sardinia was investigated in comparison to other Mediterranean islands (Corsica, Crete, Balearics etc.) in the framework of the EU funded project EPIDEMIE. In the years 2005–2008, the team of botanists from the Italian Botany Society became involved in the project “A survey of the non-native flora of Italy”, funded by the Italian Ministry for the Environment, aimed at providing a report on current knowledge of the non-native flora in the country (including</p>

<p align="center"><b>2020 Biodiversity Targets (“Aichi Targets”)</b>  <i>(Text in bold above target is a synopsis of the target, for easy reference)</i></p>	<p align="center"><b>Progress/Obstacles</b></p>
	<p>ca. 40 small islands. With concern to the knowledge of presence and distribution other alien biota, it is important to remark that Italy has been a partner in the EU funded project DAISIE, providing data on the whole country and on the two main islands.</p> <p>The first interventions aiming to eradicate black rat (<i>Rattus rattus</i>), the house mouse (<i>Mus musculus</i>) and an island population of feral cats, dates back to the 1998, through a LIFE project funded in the Tuscan Archipelago, and black rat was declared eradicated from Giannutri. Molarra (Sardinia), Giannutri and Zannone (Tuscany) are the three largest Mediterranean islands where eradications has been carried out on rats; Molarra is also the first and only European island where the baits have been distributed almost entirely by air (aerial bait distribution), according to the protocols developed in New Zealand and adopted in North America and in many oceanic islands.</p> <p>More recently, through LIFE+, other actions aiming to eradicate or control IAS in the islands of the Tuscan Archipelago have been funded, e.g. with purpose of eradicating black rat from the island of Montecristo. Other interventions will tackle feral cats on Pianosa island, mouflons (<i>Ovis musimon</i>) on Elba and Giglio islands, Hooded Crow (<i>Corvus corone cornix</i>) on Pianosa island, <i>Ailanthus altissima</i> on Capraia, Pianosa and Montecristo islands. Additionally, <i>Carpobrotus</i> spp. have been declared as eradicated from the islands of Capraia and Pianosa. Interventions for the local removal and control of <i>Carpobrotus</i> spp. (<i>C. edulis</i>, <i>C. acinaciformis</i> and their hybrids) are in place in Sardinia too. The Sardinia regional environmental authority has recently approved a 3-year plan for the eradication of the Pinus caterpillar <i>Thaumetopoea pityocampa</i>, and for monitoring the population of <i>Myocastor coypus</i>. [Additional information is provide in the ISPRA 2009 Report n. 91].</p> <p>Generally speaking, in most of the cases it was not possible to apply a strategy of early detection and early intervention on islands, therefore the cited interventions of eradication/containment/control are expensive and labour-intensive. As stated in several documents of the Commission, there is remarkable fragmentation, generality and lack of consistency of legislation addressing IAS at Community as well as Member State level and of provisions within international agreements such as the Convention on Biological Diversity (CBD) and other international instruments (e.g. IPPC, EPPO and CITES). This is particularly urgent for island territories, where eradication interventions may sort the better efficacy for restoring native biodiversity, which need tailored strategic and comprehensive approaches, improved cooperation, and action at international, national and regional level.</p> <p>There is not an agreed method, at the national level, for risk assessment and for establishing priorities for intervention, with the exception of (alien) pathogens and pest which are addressed by phytosanitary and veterinary regulations (e.g. IPPC, PHD etc.).</p> <p>IAS occurrence on Italian islands is often caused by intentional, but also unintentional, introduction through various pathways. So far only limited investigation has been done, therefore there is an urgent need for the identification, assessment and regulation of these pathways, proportional to the associated environmental and socio-economic risks which have to be evaluated. There is the need of clear definition of responsibilities, and comprehensive assessment of the risks and impacts of existing invasive alien species</p>

<b>2020 Biodiversity Targets (“Aichi Targets”)</b> <i>(Text in bold above target is a synopsis of the target, for easy reference)</i>	<b>Progress/Obstacles</b>
	<p>and those which could potentially be introduced intentionally or unintentionally, in relation to e.g. aquaculture, horticulture and ornamental plants, sailing, tourism activities, cultivation and farming, and species trade.</p> <p>More recently, the Italian Minister of the Environment, has announced financial support for the Global Invasive Species Database (GISD), the freely accessible online database of the ISSG. The GISD is acknowledged as the most authoritative and comprehensive database on alien species at the global scale. GISD will be hosted at the Environmental Protection and Research Institute (ISPRA) in Rome, Italy. The Italian Ministry of Environment is committed to provide financial contributions to enhance the improvement of the GISD and, in particular, to integrate it with other information services, thus increasing support to decision makers. The commitment of the Italian Minister is a first implementation of the actions listed in the Syracuse Charter on Biodiversity, agreed at the last G8 Environment Ministers meeting, which calls for developing and strengthening actions to prevent and control the spread of invasive alien species, and support to global information systems. From this point of view this is an important step toward the mitigation of the menace of IAS against island ecosystems.</p>
<p><b>Pressure from ocean acidification and climate change on coral reefs and other vulnerable ecosystems minimized</b></p> <p>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</p>	
<p><b><i>Strategic goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity</i></b></p>	
<p><b>17% terrestrial and 10% of coastal and marine areas are conserved in networks of protected areas</b></p> <p>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 landscape and seascapes.</p>	<p>Italy is very rich in biodiversity and, in the European Union, it has the highest number and highest density of both animal and vegetable species. Given the high population density and in order to give adequate protection to biodiversity, more than 20% of the territory is covered by different types of protected areas established both under the national law on protected areas and under the Natura 2000 Network.</p> <p>In 2009, in Italy, there were 871 protected areas: 24 national parks, 27 marine natural reserves, 147 state natural reserves, 2 archaeological submerged museums, 1 international marine sanctuary for cetaceans’ protection, 134 regional parks, 365 regional natural reserves, 171 other protected areas. The Natura 2000 network covered 2269 Sites of Community importance and 600 Special Areas of Conservation</p>
<p><b>Extinction of all threatened species is prevented, conservation status is improved</b></p> <p>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.</p>	<p>The conservation status of species changes from one group to another but in general we have several positive situations and trends of improvement. Nevertheless, we still need to do a lot for conservation and for a more effective monitoring mechanism. This may be due partly to the lack of progress in the definition of conservation objectives for Natura 2000 sites and in the drawing up of detailed management plans for the sites of the main islands (Sardinia and Sicily). At local level, competent authorities and farming communities are often poorly aware of the issues involved and of the modalities of adoption of integrated measures that bring benefits to protected plant species, wildlife, as well as to farmers and</p>

<b>2020 Biodiversity Targets (“Aichi Targets”)</b> <i>(Text in bold above target is a synopsis of the target, for easy reference)</i>	<b>Progress/Obstacles</b>
	agro-forestry-pastoral entrepreneurs . The IPAs project (Important Plant Areas) covered the whole Italian territory, including islands [Fostered by the Convention on Biological Diversity (Global Strategy for Plant Conservation, 2002) and by the European Strategy for Plant Conservation New (2008), the Important Plant Areas Program Promotes identification at the local and national level of The Most Important Areas for Plant Diversity According To Criteria Including endemism, species richness, and / or Uniqueness of habitats, Including relict ecosystems].
<p><b>Breeds/varieties of cultivated animals and plants and their wild relatives are maintained, strategies for genetic erosion are in place</b></p> <p>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.</p>	<p>The first step for a sustainable use of ABD (agricultural biodiversity) is a better knowledge and management of crop genetic resources in Italy, with particular reference to the so-called crop wild relatives that are the primordial source of variability. Italy currently cultivates 665 species, of which 551 are cultivated in the central and northern peninsula, 521 in southern Italy and Sicily and 371 in Sardinia. In Italy genetic resources of food and industrial species are concentrated and managed mainly by public institutions, the National Council for Research and Experimentation in Agriculture (CRA), the Universities and the National Research Council (CNR). The CNR also manages an important germplasm bank founded in 1970 in Bari. Public management of genetic resources is an important prerequisite for effective participation of local communities to the access and benefit-sharing (as required by the decision IX/12 of the COP held in Bonn in 2008 (<a href="https://www.cbd.int/doc/programmes/abs/factsheets/ABS-factsheet-nagoya-roadmap-en.pdf">https://www.cbd.int/doc/programmes/abs/factsheets/ABS-factsheet-nagoya-roadmap-en.pdf</a>)).</p>
<b>Strategic goal D: Enhance the benefits to all from biodiversity and ecosystem services</b>	
<p><b>Ecosystems that provide water, health, livelihoods and well-being are restored and safeguarded</b></p> <p>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.</p>	
<p><b>Ecosystem resilience and carbon stocks from biodiversity are enhanced, at least 15% of degraded ecosystems are restored, promoting joint implementation of Rio Conventions</b></p> <p>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.</p>	
<p><b>Nagoya protocol on ABS is in force and operational</b></p>	

<b>2020 Biodiversity Targets (“Aichi Targets”)</b> <i>(Text in bold above target is a synopsis of the target, for easy reference)</i>	<b>Progress/Obstacles</b>
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.	
<b><i>Strategic Goal E: Enhance Implementation through participatory planning, knowledge management and capacity building</i></b>	
<b>All Parties have an effective and updated NBSAP produced in a participatory manner</b>  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.	
<b>Traditional knowledge, innovations and practices of ILC, customary use, are respected and integrated into the Convention, ILCs participate at all relevant levels</b>  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	Some differences of definition and emphasis exist between the CBD and the current definitions of GIAHS and Cultural Landscapes under the WHC. These do, however, not make them incompatible. It should be noted, that agricultural heritage considerations compete with a wide range of other priorities within the CBD. The specific common values of pastoral systems include their importance for the conservation and sustainable use of animal breeds, the habitats provided by pastoral landscapes under pastoral management for wild biodiversity, deep reservoirs of local/indigenous knowledge on livestock rearing and health, as well as on ecological functioning.
<b>Biodiversity science and technology are improved, shared and applied</b>  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.	
<b>A substantive increase in financial resources invested in biodiversity is achieved</b>  Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan 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 resources needs assessments to be developed and reported by Parties.	