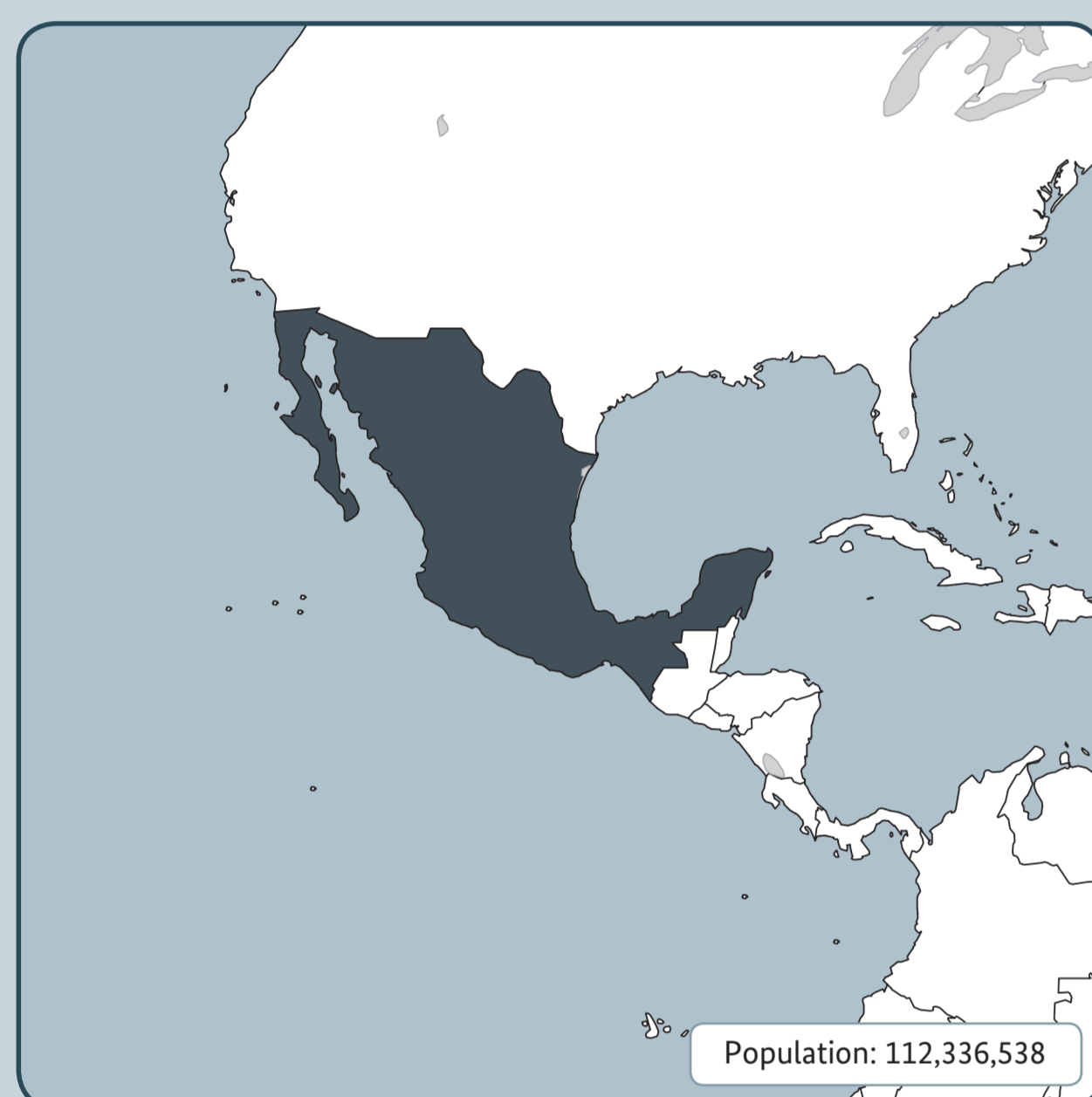


Mexico: toward the achievement of the Aichi Targets

With 1% of the terrestrial surface, Mexico hosts more than 10% of the world's biodiversity. Moreover, much of this biodiversity is exclusive to the country: between 50 and 60% of the known species of plants, more than 40% of the species of fish recorded globally (42%), amphibians (48%) and reptiles (45% of total), about 11% of birds and more than 30% of mammals, occur only in Mexico¹.

71.3% of the national territory² is natural terrestrial ecosystems in different degrees of conservation; its rate of loss has shown a decreasing trend in the last 20 years. Mexico also has 6,331 wetlands and wetland complexes, covering 10.03 million ha (5% of the national territory) and 764,486 ha of mangrove forest, so Mexico is the fourth country worldwide with the largest area of these ecosystems.



ENDNOTES
 1. CONABIO y SEMARNAT 2009
 2. SEMARNAT 2011
 3. CONAFOR - National Forestry Commission
 4. Social land property, under the modality specified in the Mexican Agrarian Law
 5. CONABIO - National Commission for the Knowledge and Use of Biodiversity
 6. CONANP - National Commission of Natural Protected Areas
 7. INIFAP - National Institute of Forestry, Agricultural and Pecuary Research
 8. INECC - National Institute of Ecology and Climate Change

For strategic goal D there is only very specific information (subnational level) and important gaps (national level). It is a challenge to systematize traditional knowledge, generate diagnosis on ecosystem priority services, as well as the impact of public policies on them.

A



Community forest conservation through the PASH-Program

In Oaxaca there are more than 74 certified community conservation areas with an area of 931.21 km² belonging to indigenous communities: zapotecos, chinantecos, chontales, mazatecos, zoques, mixes and mixtecos. One of the characteristics of these areas is their connectivity as part of a mosaic of forests, jungles and preserved bushes, areas with forestry management programs and ecotourism, constituting biological corridors that allow the movement of species.

In 2003, the Mexican government created the Program of Hydrological Environmental Services (PASH for its acronym in Spanish), financed with funds from water fees. Through this program, CONAFOR³ provides resources to the indigenous communities, supporting not only the conservation of community areas but also allowing the defense of their territories and their natural resources as elements to keep the identity of the communities themselves.

Currently, the program is applied in 2.3 million ha; these data include payments under the scheme of matching funds that support around 5000 ejidos⁴, communities and small-holders of forest lands; also apply payments differentiated into different areas according to the type of ecosystem, biological diversity and deforestation risk.



Chinanteco girl from San Juan Bautista, Oaxaca, with Vanilla Tree

- 1 Development of: National Strategy of Environmental Education for Sustainability; Website www.biodiversidad.gob.mx; Strategy for Communication and Culture for Conservation; Education Program for Conservation
- 2 Biodiversity is included in the national goal "Mexico Prosperous" of the National Development Plan
- 2 The Country also has information from the System of Economic and Environmental Accounts (INEGI)
- 3 Application of the following programs: Program of Hydrological Environmental Services (PASH); Payment for Environmental Services; REDD+; Temporal Workfare Program; National Forest Program (PRONAFOR); Programs of Soil and Water Conservation
- 4 A special Program of Sustainable Production and Consumption is being developed

C



Agreed management plan for "El Vizcaino" Biosphere Reserve

An exemplary case is the agreed management plan for "El Vizcaino" Biosphere Reserve, as it articulates the implementation of actions and projects in defense of natural heritage and for the benefit of the population: gray whale watching, which sets the rules of operation and the organization scheme for providers of touristic services, tourism carrying capacity and zoning of the Ojo de Liebre and San Ignacio lagoons; conservation in perpetuity of the salt flats and San Ignacio lagoon as a world heritage site (UNESCO); peninsular pronghorn recovery in the reserve core zone, which has produced more than 400 specimen for restocking; the Wildlife Management and Use Unit of bighorn sheep, which has increased its population by more than 200%, resulting in the establishment in the meeting minutes of beneficiary ejidos of the extraction of livestock from the areas of bighorn sheep and pronghorn, favoring the scheme of wildlife production; fishery of lion's paw scallop in Ojo de Liebre lagoon, which in five years has increased its population and use in more than 1500%.

This is possible thanks to the understanding by authorities and residents of the rule 54 of the management plan, which specifically states that within the natural protected area, natural resources must directly benefit the residents that live with or are associated to it.



Peninsular pronghorn from El Vizcaino Biosphere Reserve

- 11 Enactment of 11 new Protected Areas between 2009 and 2013, increasing the protected surface by 1.6 million ha in comparison to 2008
- 11 Elaboration of 61 management programs for Natural Protected Areas during the same period (so 65% of NPA under federal jurisdiction have a management program)
- 12 CONANP⁶ took a historic step with the reintroduction of mexican gray wolf specimens to the wild. Through PROCER they also have attended additional 34 species at risk such as bison (*Bison bison*), golden eagle (*Aquila chrysaetos*), and the californian condor (*Gymnophaps californianus*)
- 13 CONABIO led the "Proyecto Global de Maíces" (Global Maize Project) in collaboration with INIFAP⁷ and INECC⁸, which aims to update the information of maize and wild relatives in Mexico to determine centers of genetic diversity, making possible to identify sustainable intensive technological options for it

B



Sustainable reforestation by the indigenous community of Nuevo San Juan Parangaricutiro

More than 80% of forest ecosystems of Mexico, where much of the biodiversity is concentrated, is property of ejidos and communities, owners of an important biological wealth. In this context, the model of sustainable reforestation has become an effective strategy to contain, mitigate and reverse the deterioration and degradation processes that alarmingly affect many forest areas of the country.

Such is the case for the indigenous community of Nuevo San Juan Parangaricutiro, in Michoacan State, where a project supports the reforestation of 50 ha of pines (*Pinus pseudostrobus*) and partly of *Alnus jorullensis* per year, with seedlings produced entirely in their own nurseries, using germplasm collected in the temperate forests of their own community. The implemented actions include systematic monitoring, maintenance actions (replacement of missing plants, weed control) and protection (perimeter fencing against livestock, cleaning and rehabilitation of firebreaks). Thus from 2010 to 2013, the reforestation of 200 ha has been achieved.

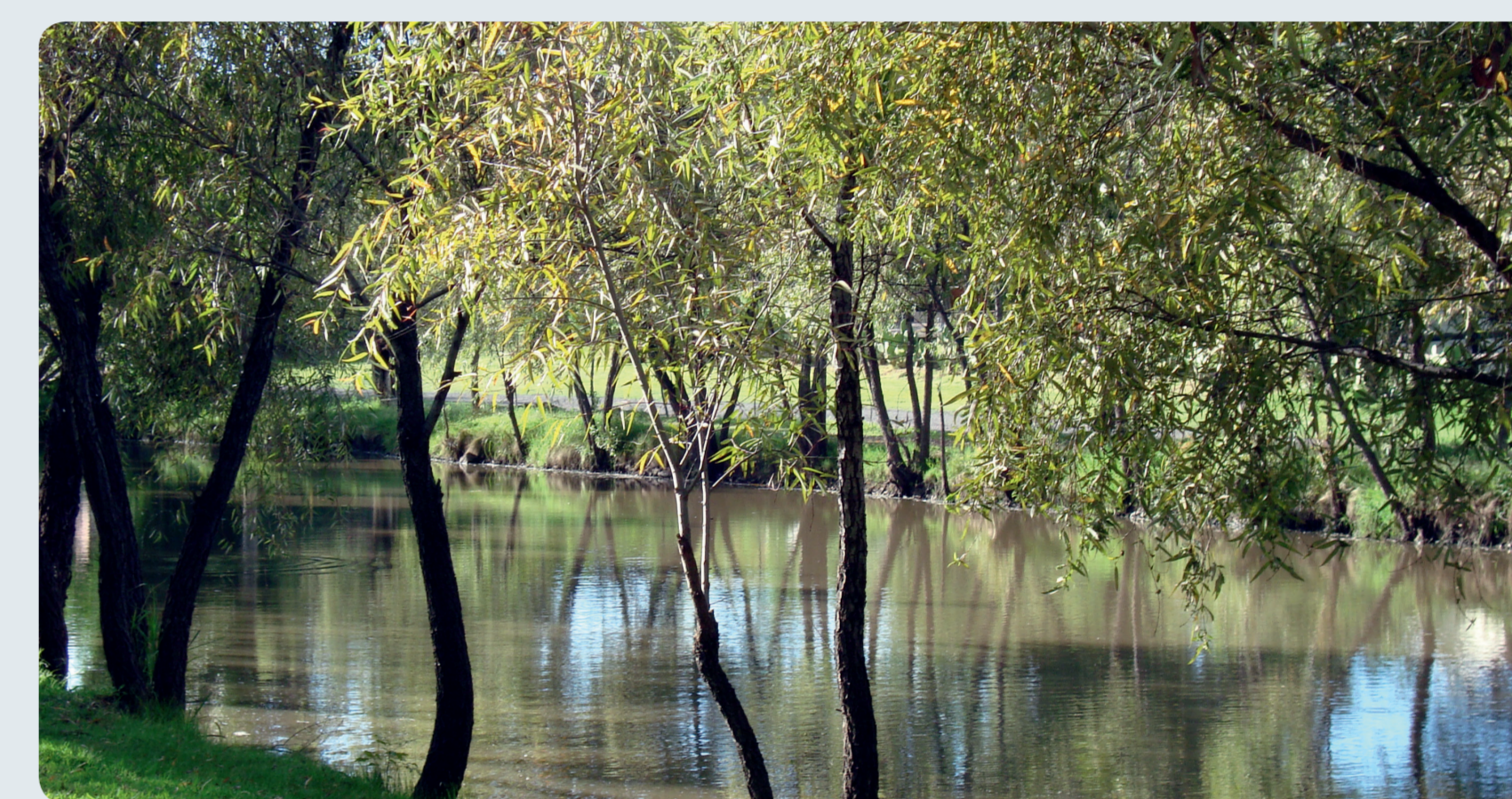
Thanks to efforts like the sustainable reforestation in Nuevo San Juan Parangaricutiro, Mexico ranks first worldwide in community management of forests certified as sustainable, both in temperate and tropical zones, has a certified area of 792.275 ha and produces 1.23 million m³ of timber, also certified.



Nursery for reforestation in a community of Michoacan

- 5 The annual rate of ecosystem loss shows a decreasing trend in the last twenty years: Jungles from 0.57% to 0.3%; temperate forests from 0.09% to 0.02%; bushlands from 0.26% to 0.14%
- 5 Elaboration of the National Wetlands Inventory
- 6 Publishing of the Mexican Official Standard NOM-049-SAG/PESC-2014 which determines the procedure to establish safe havens for fish stocks in waters under federal jurisdiction
- 9 Preparation of the National Strategy on Invasive Species in Mexico, so it was possible to identify 956 exotic species in the country
- 9 CONABIO's⁵ Information System for Invasive Species has registered 1957 species; 956 introduced exotic species and 309 translocated native species with invasive behavior

E



The State Biodiversity Strategies

Biological and cultural diversity of Mexico makes that the implementation of the Biodiversity Strategy and Action Plan should be adapted to different scales and realities, so CONABIO has promoted the development of State Biodiversity Strategies in collaboration with subnational governments and local representatives of several sectors of the society.

The initiative of the State Biodiversity Strategies and especially the establishment of State Biodiversity Commissions, seek to improve planning capabilities and forecasting on the management of biological resources, as well as the institutionalization of public policies on biodiversity, by generation of knowledge and the development of tools for decision making and participatory planning.

Up to date, the initiative has involved 22 Subnational Governments that have developed 12 published State Biodiversity Studies (Biodiversity Assessments), 9 published Biodiversity Strategies (e.g. Puebla, Chihuahua, Veracruz, Chiapas, Guanajuato and Quintana Roo) and 2 State Biodiversity Commissions (Intersectorial Commissions linked to the Subnational Government).



Guanajuato State Biodiversity Presentation

- 17 The updating of the Biodiversity Strategy and Action Plan (ENBIOMex) has begun. The strategy has six strategic areas:
 - 1) Knowledge;
 - 2) Conservation;
 - 3) Sustainable use;
 - 4) Attention to pressure factors;
 - 5) Environmental education and culture;
 - 6) Biodiversity mainstreaming and governance
- 17 Mexican law stipulates the generation of information systems in the regulated matters (e.g. SNIB, SNIARN, SNIF, SIAP, National Biosafety Information System, etc)
- Through the CONABIO the initiative of the State Biodiversity Strategies is promoted in order to support the improvement of local capacities. It involves 22 Subnational Governments that have developed 12 Biodiversity Assessments and 9 Strategies (e.g. Puebla, Chihuahua, Veracruz, Chiapas, Guanajuato and Quintana Roo)



IMPRINT
 Responsible:
 Dr. Andrea Cruz Angón
 Coordinator of Biodiversity Strategies and International Cooperation
 National Commission for Knowledge and Use of Biodiversity (CONABIO)
 Núm. 4903,
 Col. Parques del Pedregal,
 Delegación Tlalpan,
 14010, México, D.F.
 Tel. 5004 5000
 _cn@conabio.gob.mx

OBJECTIFS D'AICHI POUR LA BIODIVERSITÉ

BUTS STRATÉGIQUES

A Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

- 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.
- 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.
- 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.
- 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.

B Reduce the direct pressures on biodiversity and promote sustainable use

- 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.
- 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.
- Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.
- Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.
- 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.
- 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.

C To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

- 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.
- 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.
- 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.

D Enhance the benefits to all from biodiversity and ecosystem services

- 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.
- 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.
- 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.

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

- 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.
- 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.
- 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.
- 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.