

EXECUTIVE SUMMARY



State Strategy for the Mainstreaming of Biodiversity in the Sectors

agriculture • ranching • fisheries • aquaculture • forestry





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agriculture-ranching • fisheries-aquaculture • forestry



On behalf of:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety



of the Federal Republic of Germany



This publication is an executive version of the *State Strategy for the Mainstreaming of biodiversity in the agriculture-ranching, fisheries-aquaculture and forestry sectors*.

The complete strategy can be consulted at:

<https://gobjal.mx/BiodiversidadSectoresProductivos>



Introduction

The *State Strategy for the Mainstreaming of Biodiversity in Productive Sectors* (known as IBP-Jal from its Spanish acronym) looks to strengthen activities in the agriculture-ranching, fishing-aquaculture and forestry sectors in terms of biodiversity. In this strategy, biodiversity is considered as an integral part of the functioning of each productive sector to achieve healthy and resilient ecosystems that ensure the supply of essential goods and services for human well-being and long-term economic growth.

Looking to position **Jalisco** as an example of sustainability.





Vision

By 2030, the agriculture-ranching, fisheries-aquaculture and forestry sectors of the State of Jalisco are effectively and increasingly integrating the sustainable use and conservation of biodiversity in their plans, programs and actions, in order to guarantee the contributions of each one of these three sectors to sustainable development, productivity and food security of the State, contributing, in turn, to the human well-being and the conservation of ecosystem services.



General objective

To Guide the work and decision-making of SADER Jalisco (Ministry of Agriculture and Rural Development of Jalisco) and SEMADET (Ministry of Environment and Territorial Development of Jalisco), as well as collaboration among them and with other relevant stakeholders in the State of Jalisco, to achieve the sustainable development of the agriculture-ranching, fisheries-aquaculture and forestry sectors, together with the conservation of the biodiversity and its ecosystems, through the permanent improvement of actions promoted by the state government and the articulation of strategies and policy instruments.



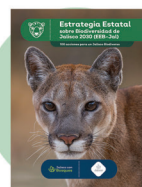
Background

The IBP-Jal is the first instrument of its kind prepared by a sub-national government in Mexico. It is important to note that this Strategy is a multidisciplinary and multisectoral effort, it is aligned with the *State Strategy on Biodiversity of Jalisco* (known as EEB-Jal from its Spanish acronym), as well as with the guidelines derived from the Convention on Biological Diversity (CBD) and the United Nations for Food and Agriculture Organization (FAO). This alignment guarantees the development of a robust strategy in accordance with Mexico's international commitments on food security, sustainable development and mainstreaming of biodiversity.



SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals of the United Nations 2030 Agenda:



State Strategy on Biodiversity of Jalisco (EEB-Jal), axis 3 of this strategy is based on the IBP-Jal.

Biodiversity in Jalisco: State study (2017).

2020

2019

2017

2016

2015

2011

2005

1992

1972

Millennium Ecosystem Assessment.

United Nations conference on the Human Environment held in Stockholm, Sweden.

The state of Biodiversity for Food and Agriculture in the world (FAO).

XIII Conference of the Parties to the Convention on Biological Diversity, held in Mexico.

Strategic Plan for Biological Diversity 2011-2020. Define the 20 Aichi Goals.

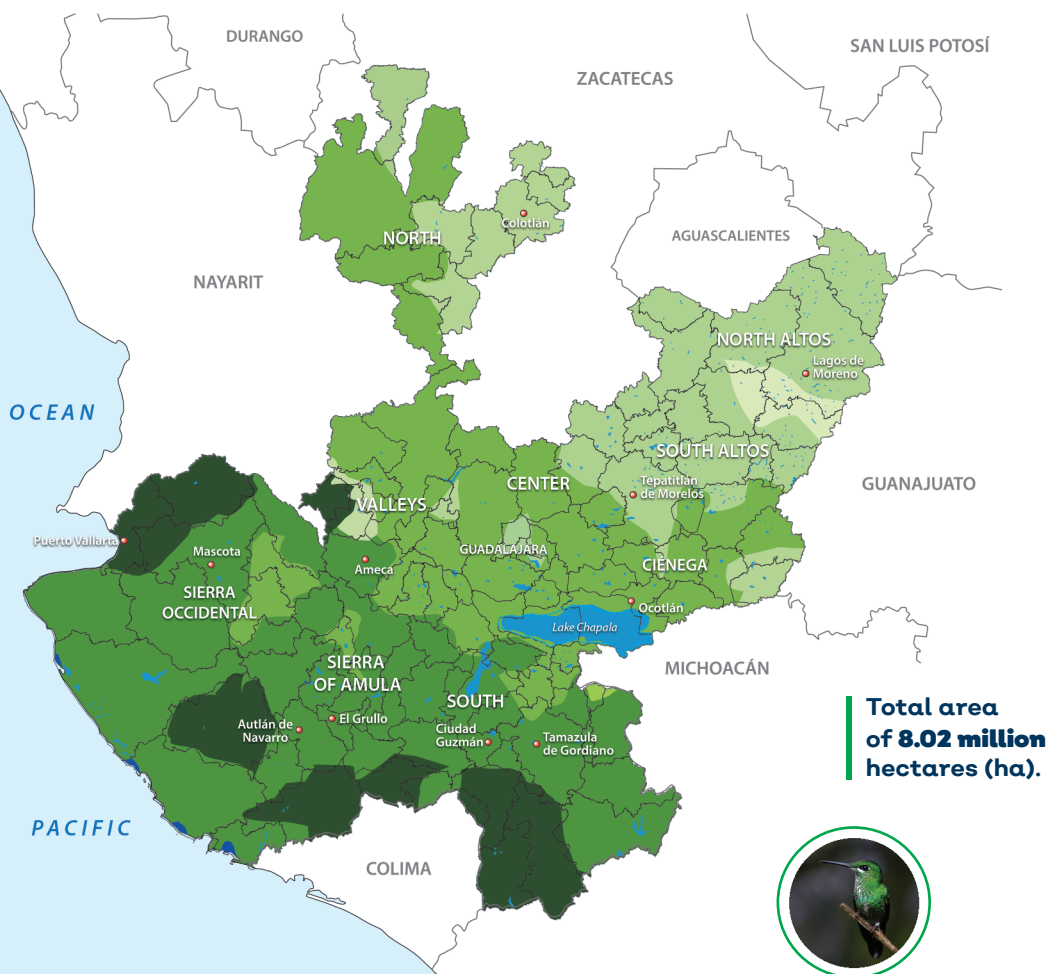


Convention on Biological Diversity (CBD) at the Earth Summit held in Rio de Janeiro, Brazil.



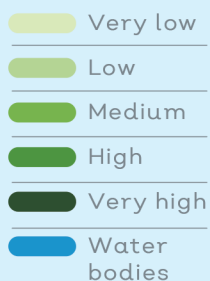


Biodiversity of Jalisco



Total area
of **8.02 million**
hectares (ha).

Biodiversity index



More than half the **bird species**
and one out of every three
mammalian species from
Mexico live in Jalisco.

351 km of coastline
and **7 hydrological regions**
contribute to a great
diversity of species and
high primary productivity.

Among Mexican States
it is the **4th place** in **floristic**
richness and **5%** of these
plants are endemic species.

Wild maize teosintle (*Zea diploperennis*) is an endemic species, present in the Sierra de Manantlán Biosphere Reserve, of great cultural, genetic, conservation and food security, relevance.



Traditional **agroecosystems** are management models of agricultural and livestock areas as if they were ecosystems, an extension of the environment. They are mainly associated with customs and practices of rural and indigenous communities.



Traditional orchards, **Milpa** and Agrosilvopastoral systems are examples of traditional agroecosystems in Jalisco and are home to different species and varieties, which is why they are considered reservoirs of genetic diversity.



In Jalisco there is a great genetic variety of cultivated species of economic importance: corn (*Zea mays*), common beans (*Phaseolus vulgaris*), squash (*Cucurbita spp.*), Green or peel tomato (*Physalis philadelphica*) and plum (*Spondias purpurea*).

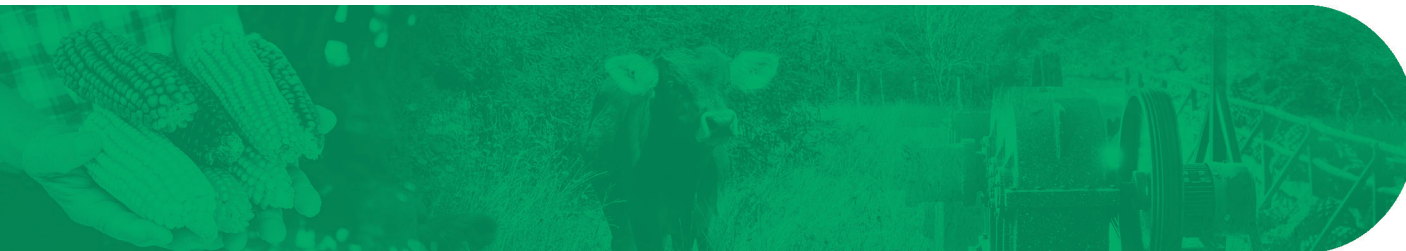
Main threats to biodiversity



- 1 Water overextraction.
- 2 Soil and water contamination by residues and agrochemicals.
- 3 Unplanned agriculture and cattle raising.
- 4 Deforestation.
- 5 Soil erosion and silting of water bodies.
- 6 Introduction of exotic plants and animals.



Jalisco's agriculture-ranching, fisheries-aquaculture and forestry



■ Jalisco is one of the most important entities for its contribution to the country's agri-food sector.

■ It is the national leader in contributing to the National Agricultural Gross Domestic Product (GDP).

■ In 2017 it contributed 12%, with a value of 67.8 billion pesos (approximately 3 billion dollars).



Emissions of greenhouse gases



■ Jalisco is responsible for approximately 6% of the country's Greenhouse Gas (GHG) emissions.

■ The agriculture-ranching and forestry sectors contribute 19% of the state's emissions, with cattle raising as the biggest contributor.





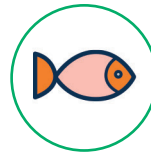
Agriculture-ranching context



- National leader in the production of agave, pork, egg and milk.
- Second place in the production of beef and poultry, sugar cane, grain corn and avocado.

Commercial value

- The cultivation of agave, the raw material to produce tequila, generates almost 18 billion pesos (approximately 900 million dollars). It is the most important crop by value of production.
- Also noteworthy are the production of avocado and berries for the domestic and export markets.



Fisheries-aquaculture context



- In 10 years, fish production tripled. Mainly from inland fishing and fish farming.
- Main fishery products:
 - Inland waters:** Bream (tilapia), carp and silverside fish "charal".
 - Marine waters:** Red snapper, porgy and Jack crevelle.
 - Coast:** Estuary shrimp and oyster.



Forestry context



- 4.8 million hectares of forest cover (60% of the state territory).
- 85% of the wood used is pine and 10% oak.

Commercial value

- Approximately 342 thousand cubic meters of round wood are produced, with a commercial value of \$ 248,964,860 million pesos (approximately 12 million dollars).

Threats

- It is one of the states with the highest deforestation in the country, with deciduous tropical forest and oak forests being the most affected ecosystems.
- Forest fires and forest pests cause deterioration and loss of forest cover.





Axes and action lines



AXIS I: SUBSTANTIVE

Action lines:

- 1 Participation and capacity building for integration and assessment.
- 2 Sectoral impact on biodiversity and sustainable management.
- 3 Management instruments and promotion of sustainable production.



AXIS II: COORDINATION

Action lines:

- 4 Intersectoral and inter-institutional coordination.
- 5 Sectoral planning instruments.
- 6 Communication and dissemination on biodiversity and ecosystem services.



AXIS III: SUPPORT

Action lines:

- 7 Financing for sustainable production.
- 8 Legal framework.
- 9 Evaluation and monitoring mechanisms.



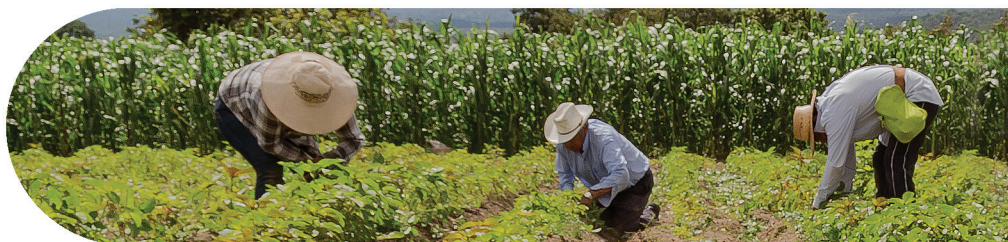
Actions



Agriculture-ranching sector

26 actions

Some key actions of the agriculture-ranching sector to integrate biodiversity:



Programing of agricultural burns.



Promote the use and management of agrobiodiversity.



Increase the use of green technologies.



Limit or prohibit the use of agrochemicals harmful to the environment and health.



Promote sustainable production practices, such as silvopastoral systems.



Reduce land use change, mainly for avocado, berries, agave and extensive livestock grazing.



Implement a pollinator strategy.



Certificates and seals of approval with biodiversity criteria.

Promotion and impulse of good practices with producers and consumers.



Credit mechanisms for small producers with good practices.



Actions



Fishing-aquaculture sector

23 actions

Some key actions of the fishing-aquaculture sector to integrate biodiversity:



Control of invasive species in water bodies.



Compliance with closures and bans.



Production and consumption of native species.



Optimal use of species and protection of threatened species.



Dissemination of sustainable practices with producers.



Tax incentives for producers with sustainable practices.



Certifications, stamps and brands with biodiversity criteria.



Restoration and conservation of key ecosystems for the fishing sector, for example, mangroves.



Engagement with research centers and universities.



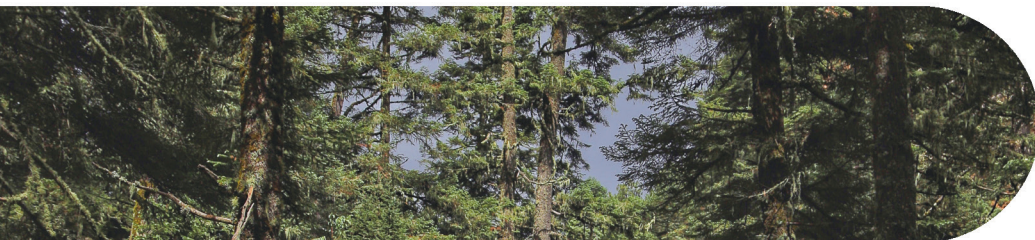
Include biodiversity criteria in programs.



Actions

Forestry sector

28 actions



Some key actions of the forestry sector to integrate biodiversity:



Continuing training.



Promote the organization of ejidos and communities (collective landowners).



Community forestry.



Forest management and chain of custody certifications.



Promote consumption of certified timber and non-timber products.



Promote sustainable management of wetlands and mangroves.



Control of forest pests and diseases.



Fire management state strategy.

Productive restoration through agroforestry systems.



Biodiversity monitoring.



Implementation

IBP-Jal seeks to maintain or increase production capacity, without deteriorating biological diversity, to simultaneously gain both in terms of conservation and benefits for productive activities.

The mainstreaming of biodiversity in the productive sectors is a dynamic process that must be accompanied by institutional support, political will and social support. Intersectoral coordination is essential to drive the implementation of the strategy in an operational and participatory manner.



Topics of intersectoral coordination



Fire management



Mangroves



Agroforestry systems



Territorial regulations
and Land planning



Agrochemicals



Evaluation and monitoring



Bonding (link-up)

Intersectoral coordination mechanisms

- Municipal councils for sustainable rural development.

- Intermunicipal alliances for environmental management.

- State and regional Forestry Councils.



- Other technical committees such as fire management, forest health, REDD +, pollinators, among others.

- The Silvopastoral and Agroforestry Systems Operational Group.

- Committee of the Health, Safety and Agri-food Quality Agency of the State of Jalisco (Asicaj).

- State Biodiversity Committee.



 **Cover photos:**
Scott Brennan, Danáe Kótsiras and Alejandro Acosta.

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Alejandro Acosta, Carmen Gómez Lozano, Scott Brennan,
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The Strategy of the State of Jalisco for the Mainstreaming of Biodiversity in the agriculture-ranching, fishing-aquaculture and forestry sectors (IBP-Jal) is the result of the cooperation between the Government of Jalisco, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), GmbH and the International Climate Protection Initiative (IKI) of The Federal Ministry of the Environment, Nature Conservation and Nuclear Safety of the Federal Republic of Germany, together with the French Development Agency (AFD).

You can help implement the strategy
to conserve our **biodiversity**.

Download the complete strategy in:
www.gobjal.mx/BiodiversidadSectoresProductivos

