INTRODUCTION

The Fisheries sector in Mexico has significant advances regarding recognition of the importance of biodiversity as a priority axis for fisheries and aquaculture productivity. Public policy instruments acknowledge the relevance of the sustainable use of biodiversity. This trend has a long history where important contributions expressed in national and international instruments stand out, like the Code of Conduct for Responsible Fishing where Mexico was the promoter within the UN Food and Agriculture Organization (FAO); as well as the implementation of a whole series of regulations and standards regarding the conservation and sustainable utilization of fishery and aquaculture resources at a national level whose implementation is linked to what the General Law of Sustainable Fishing and Aquaculture states; National Fisheries Chart recommendations and other laws resulting from binding relationships or coordination.

Legal framework and planning instruments recognize that services provided by ecosystems are critical to sectoral objectives; this is shown in laws, official standards and bans. Likewise, there are other instruments linked to biodiversity conservation, such as fishing refuge zones, fishing regulation programs, management plans and specific projects, as the decrease in fishing effort, to mention a few.

Regarding fisheries management, there is a wide experience in the implementation of good practices, which need to be evaluated, extend their execution and analyze the interactions and status of ecosystems that are indirectly relevant to the activities of the sector and can be affected by activities of others. Although many positive impact policy elements have been identified, in some cases we need to strengthen the regulatory aspects that give certainty to the instruments and for incorporating criteria to strengthen measures for the sustainable use and biodiversity conservation where fishing activity is concerned.

The elaboration and application of this Strategy reaffirms the commitment to strengthen the activities that the fisheries and aquaculture sector has done; and highlights the importance of inter-agency work, through a coordination mechanism to design incentive schemes aimed at measures contributing to biodiversity sustainability, such as good practices and fisheries certification.

An important aspect is the link of sectoral integration of the conservation and sustainable use of biodiversity with the recent Mexican National Biodiversity Strategy (ENBioMEx), providing some important issues, such as having a coordinating authority that strengthens the implementation of these actions, by taking into account collaboration between sectors as a key element to achieve biodiversity conservation and productive sustainability.

The mainstreaming of sustainable use and conservation of biodiversity must be seen as a long-term project that must be integrated to planning processes and program design in order to achieve sustainability and improve their contributions for the benefit of society and the environment.

This highlights the importance of strengthening and consolidation of inter-agency work, through effective coordination mechanisms, working on scheme designs that promote the implementation of sustainable practices and development of alternative technologies for promoting sustainable productivity through the impulse to incentives for added -value products and schemes supporting the diversification of products and development of chains of value.
CONSTRUCTION PROCESS

The current strategy was made within the framework of the United Nations Biodiversity Conference, Cancun, 2016 (COP13) of the Convention on Biological Diversity (CDB). CONABIO, German Cooperation Agency (GIZ) and Biodiversity Finance Initiative (BIOFIN-Mexico) -along with the agricultural, forestry, fishery and tourism sectors- developed a series of assessments revising the public policy instruments and identifying the opportunities for the mainstreaming of conservation and sustainable use of biodiversity in each one. With the support of those assessments, four sectoral workshops for biodiversity mainstreaming were made, with the objectives of strengthening and complementing the sectoral assessments; to socialize and make the assessments inclusive; to identify the instruments with the better opportunity for biodiversity integration and to identify the key elements in order to generate a work and coordination program for the follow-up of actions.
Finally, these four areas were able to share their acquired knowledge during the "Intersectorial Workshop for the Integration of Conservation and Sustainable Use of Biodiversity", which had the support of SAGARPA, SECTUR, CONAPESCA, CONAFOR, SEMARNAT, CONANP, CONABIO, GIZ and BIOFIN-México. During this workshop, all four Sectoral Strategies for Biodiversity Mainstreaming were presented, and the participants worked to identify the best opportunities and mechanisms of inter-sectoral coordination and collaboration with spatial focused initiatives that contribute to achieve biodiversity integration.

VISION

At 2022, Mexico’s fisheries sector efficiently incorporates sustainable use and biodiversity conservation within its plans, programs and actions to guarantee sectoral contribution to food security and development of the country; helping the well-being of society.

OBJECTIVE

To guide, design and promote strategic actions that contribute to sustainable development and conservation of natural capital, by implementing the Strategy for Biodiversity Mainstreaming, programs and actions of the Fisheries and Aquaculture Sector at a national level.
AXES AND STRATEGIC LINES

Nine axes, grouped in three categories (substantive, coordination and support) and forty strategic lines for the Fisheries and Aquaculture sector were identified:

SUBSTANTIVE AXES

They refer to central tasks needed to integrate the conservation and sustainable use of biodiversity in the sector, i.e. essential actions to achieve the presented vision.

Participation: Actions designed to strengthen or establish cooperation schemes and shared responsibility for conservation and sustainable use of biodiversity and their environmental services.

- To link research to fisheries and aquaculture sector requirements to solve situations that hinder the sustainability of fishery resources, their ecosystems and to promote responsible use.
- To promote and strengthen the relationship between producers, industrial sector (transformation), civil organizations, giving priority to the promotion of responsible consumption and changes in production behavior.
- To strengthen the operation of the Advisory Committees on Fisheries Management in the country, and to incorporate its constitution and entity in the General Law of Sustainable Fisheries and Aquaculture framework, as well as in its Regulations.
- To establish criteria for setting the National Prize of Sustainable Fisheries and Aquaculture.
- To promote productive diversification and employment in coastal communities through sustainable activities.

Sectoral Impact on Biodiversity: Measures contributing to assess and measure sectoral impact on the sustainable use and conservation of biodiversity, as well as to propose, or strengthen, measures aimed at reducing the impact of fishing activities on ecosystems.

- To promote inter-agency cooperation schemes to impulse sustainable use and conservation of biodiversity, considering an ecosystem-based management to increase productivity.
- To strengthen research that promotes the development of selective capture systems and other technological improvements, to contribute to sustainable use and protection of biodiversity.
- To set actions for optimum management and usage of species, without deteriorating the ecosystem and taking into account the protection of species with a special protection regime.
- To estimate the impact and effectiveness of Mexican Official Standards and other management measures, such as bans, catch quotas, Fisheries Refuge Zones, and other regulatory instruments with direct sectoral impact on conservation and sustainable use of biodiversity.

Instruments and Mechanisms for Management and Development: Actions encouraging sustainable production and the creation of incentives through products and services of added value that consider criteria for the conservation and sustainable use of biodiversity, alternative technology development, promotion of good practices, market opening and chains of value.

- To promote and generate incentives for fisheries certification at national level, with clear medium-term goals and taking into account experiences with current certifications at the international level, adapting them to national conditions.
- To encourage actions for the control and eventual eradication of invasive species and, if possible, its use, as well as promoting aquaculture of native species as a supplementary way of containment of these species.
- To evaluate and, if applicable, to avoid subsidies adverse to biodiversity, strengthening those which contribute to...
the integration of actions for the sustainable use and preservation of biodiversity in plans, programs and sectoral actions.

- To set actions for strengthening chains of value along with marketing strategies and synergies with involved actors, facilitating fishermen access.
- To increase added value of fisheries and aquaculture products through schemes backed by public policies.

**COORDINATION AXES**

They promote linkage and inter-relation of different branches and institutional instruments to facilitate integration of sustainable use and preservation of biodiversity at all instances.

**Institutional Capacity and Arrangement:** Impulse to inter-institutional and inter-sectoral coordination, institutional capacity strengthening for an effective execution of conservation integration and sustainable use of biodiversity among sectors.

- To promote collaboration instruments regarding integration measures for sustainable use and preservation of biodiversity in sustainable fisheries and aquaculture.
- To strengthen institutional capacities, by strengthening its structure focusing on conservation and sustainable use of biodiversity.
- To establish an inter-agency coordination mechanism that effectively links institutional efforts for the integration of measures for sustainable use and preservation of biodiversity within plans, programs and actions.
- To set the involvement and collaboration that strengthen fishing activities in protected natural areas, as well as to establish criteria for subjecting this activity to an environmental impact assessment of these areas.
- Capacity building at a national level in order to have entities certifying sustainable use of fisheries resources and aquaculture.

**Instruments for Sectoral Planning:** Elements considered in institutional programs and policies, influencing on production processes and services, which directly or indirectly support the mainstreaming of conservation and sustainable use of biodiversity.

- Changes in production systems to avoid adverse effects on biodiversity.
- To contribute and strengthen sectoral participation in combating poverty at marginalized areas to prevent that marginalization affects the sustainable use of fishery resources.
- To implement a national policy that contributes to the conservation and sustainable use of biodiversity focused on an ecosystem-based management.
- Effective management of fishing capacity, to cut down overcapacity where applicable, to improve access rights to users (including community-level), as well as waste reduction for recovering fisheries and the strengthening of aquaculture.
- To include Climate Change subject in the fisheries management instruments.

**Communication and Divulgation:** Actions encouraging knowledge transmission as a key tool to create a culture that values biodiversity and the services it grants to productive areas.

- To establish education programs with clear objectives and methods focused on the various involved sectors.
- To generate mechanisms of divulgation and dissemination of biodiversity values within the sector.
- To strengthen transparency schemes and dissemination of information.
- To develop and implement an inter-agency information platform on biodiversity, which serves as a tool and base for sectoral decision making.
SUPPORT AXES

Actions and required elements to achieve input supply and enabling necessary features at institutional level to effectively integrate conservation and sustainable use of biodiversity.

**Financing:** Actions related to location of economic resources for sustainable productivity and biodiversity mainstreaming achievement, considering both the budget of authorities, and support and incentive programs for producers and service providers who follow practices in accordance with the conservation and sustainable use of biodiversity.

- To have a sectoral budget that ensures the implementation of the strategy for sustainable use and biodiversity conservation mainstreaming in plans, programs and productivity-focused activities.
- To execute a sectoral budget assessment to identify changes and propose an effective redirection and strengthening of sustainable use and biodiversity conservation in plans, programs and productivity-focused activities.
- To guide programs to support research and promote inter-sectoral coordination activities integrating sustainable use and conservation of biodiversity in plans, programs and productivity-focused activities.

**Legal Framework:** Establishment of strong and coherent legal instruments that promote and facilitate the execution of the goals of conservation and sustainable use of biodiversity, enabling the relationship of sectors with its different elements.

- To evaluate, identify and promote reforms to fisheries sectoral regulatory framework which, through a transversality approach, strengthen in the sector’s attribution for sustainable use and conservation of biodiversity, and, if applicable, strengthen sanctions against the practice of illegal fishing.
- To strengthen fisheries governance mechanisms, so they take into account biological diversity in order to promote preservation and recovery of species with a special protection regime.
- To take advantage of the best available technology to strengthen inspection and surveillance, as well as to generate mechanisms of traceability of fisheries products, in coordination with the competent authorities.
- To participate in the elaboration of the exotic and invasive species list, and their management measures.

**Monitoring and Evaluation Mechanisms:** Creation and strengthening of information systems needed to the monitoring and evaluation of the fulfillment of the goals indicated in the biodiversity mainstreaming strategic lines, including base lines and indicator design.

- To improve statistical records corresponding to capture, fishing effort and capacity.
- To develop indicators and reference points of sustainable use and conservation of biodiversity linked to the sectoral public policies instruments.
- To promote and support the evaluation of fisheries regarding sustainability standards, impact of sport fishing and evaluation of by-catch and non-target species.
- To promote applied research to strengthen the efforts of fisheries and aquaculture traceability.
- To evaluate efforts and contributions that sustainable use and biodiversity conservation are making on a regular basis.
- To promote inter-agency coordination for a joint evaluation, given the scope of competences, of the situation of the ecosystems that are relevant to sectoral activities, such as reproduction and development sites of commercially important species, which may be affected by other sectoral activities.
- To encourage ecosystemic-based comprehensive research and that related to deep water for the development of new fisheries.
Strategy for Biodiversity mainstreaming.
Fisheries and Aquaculture (2016-2022)