Inclusive forest-positive agriculture through integrated landscape approaches:

THE ROLE OF THE MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT IN MEXICO
Mexico’s context

POPULATION GROWTH
WW
8,300
MILLION PEOPLE FOR 2030
(FAO)

MEXICO’S AGRICULTURAL
FRONTIER
22
MILLION ARABLE HECTARES
(SIAP)

GRASSLANDS, FOREST,
SCRUBLANDS AND DESERTS
1,750
MILLION HECTARES NOT
SUITABLE FOR AGRICULTURE
(SEMARNAT)

CLIMATE CHANGE
MEXICO IS LOCATED WITHIN THE
40
COUNTRIES WITH THE GREATEST
IMPACT OF CLIMATE CHANGE
(ÍR C 2018)

View of Agricultural Sector

Current approach

- Food self-sufficiency and Food Security
- Government support mainly small and medium farmers, do not let anybody behind.
- Sustainable agricultural practices.
- Goals: natural resources conservation, ecosystem services and sustainable agricultural productivity.

Ministry of Agriculture and Rural Development
Timeline Policies related to Forest-Positive Agriculture

2010
National forest fire protection program

2011
Territorial development in forest areas with agricultural activity

2015
Forest fire prevention and combat

2016
COP 13 Mainstreaming Biodiversity
Integration and alignment of public policies agricultural and forestry

2017
Integration of biodiversity to agriculture
Subsidy exclusion to projects develop on deforested areas

2018
Sustainable Forestry Development Law

2020
Mainstreaming Biodiversity in Rural Landscapes of Mexico

2021
Prevent fires due to the use of fire in forest and agricultural areas

2010-2018
Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación
Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food

2019-present
Secretaría de Agricultura y Desarrollo Rural
Ministry of Agriculture and Rural Development

COP 13 UN Conference, Biodiversity
Global Environment Facility
Wildfires in Forest Areas 2020

378,928 ha. of forest were affected by 5,913 fires

Baja California, Guerrero, Quintana Roo, Jalisco and Oaxaca represent **58.3%** of the affectations

### Affected Areas

<table>
<thead>
<tr>
<th>State</th>
<th>Affected area (ha)</th>
</tr>
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<tbody>
<tr>
<td>Baja California</td>
<td>79,299</td>
</tr>
<tr>
<td>Guerrero</td>
<td>49,413</td>
</tr>
<tr>
<td>Quintana Roo</td>
<td>41,678</td>
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<tr>
<td>Jalisco</td>
<td>29,677</td>
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<tr>
<td>Oaxaca</td>
<td>20,693</td>
</tr>
<tr>
<td>Michoacán</td>
<td>19,767</td>
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<tr>
<td>Chiapas</td>
<td>17,627</td>
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<tr>
<td>Durango</td>
<td>12,901</td>
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<tr>
<td>Nayarit</td>
<td>11,740</td>
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<tr>
<td>Campeche</td>
<td>10,946</td>
</tr>
<tr>
<td>Subtotal</td>
<td>294,040</td>
</tr>
<tr>
<td>National (%)</td>
<td>78</td>
</tr>
<tr>
<td>Other</td>
<td>84,888</td>
</tr>
<tr>
<td>TOTAL</td>
<td>378,928</td>
</tr>
</tbody>
</table>

### Possible causes

- **35%** agricultural practices (agricultural burns and pasture regrowth)

- **2,070** fires affecting **121,257 hectares**

- **Illegal activities**
- **Smoker**
- **Natural fires**
- **Highway clean**
- **Agricultural activities**
- **Unknown**
- **Hunters**
- **Other productive activities**
- **Festivals and rituals**
- **Livestock activities**
- **Campfire**
- **Garbage burning**
- **Forest harvesting residues**
- **Transportation**
Efforts to reduce the use of fire in agriculture

Sustainable Forestry Development Law
Last modification April 26, 2021
Art 24. Sec. VII. Design and apply a strategy for fire management and promote agricultural production alternatives that exclude the use of fire.

Official Mexican Rule
NOM-015-SEMARNAT/SAGARPA-2007
Updating process
This NOM established the technical specifications and methods for the use of forest fires and agricultural burns.

Agricultural Subsidy Exclusion
Subsidy exclusion to projects develop on deforested areas outside the agricultural frontier.

- Agriculture Development Program (2017-2019)
- Agriculture, Livestock, Fishing and Aquaculture Development Program (2020-2021)

Government Actions

- Capacity building to promote alternative practices (conservation agriculture) to benefit soil and water quality by MasAgro Program in collaboration with CIMMYT.
- Promoting online videos for different states (Chiapas, Guerrero, Hidalgo, México, and other states) presenting alternative practices and explaining NOM-015.
- Campaign to create awareness among farmers, through radio and social networks.
- Incendios y Quemas Mx App. Application to notify controlled agricultural burns and forest fires.
Mainstreaming Biodiversity in Rural Landscapes of Mexico

Objective: Mainstream biodiversity in rural landscapes by implementing sustainable policies and practices in the agricultural sector.

- Improve water management
- Promote forest conservation & restoration
- Soil restoration
- Crop planning strategy
- Promote natural connectivity
Actions that contribute to forest-positive agriculture

National Strategy for the Conservation and Sustainable Use of Pollinators (ENCUSP)

- Short, medium, and long term actions
- Recognize interrelations between natural ecosystems and ecosystem services for agriculture
- Interlinks between CC, biodiversity and food security

7. LANDSCAPE, CONNECTIVITY AND BIOCULTURAL ASPECTS

**Specific action 7.1.1** Promote the conservation of habitats, vegetation and native germplasm at landscape level.

**Specific action 7.1.3** Promote a comprehensive and participatory territorial planning.

8. PROMOTING SUSTAINABLE AND BIODIVERSITY-FRIENDLY PRODUCTION

**Specific action 8.1.1** Promote agricultural practices favorable to pollinators, that include actions that reduce deforestation and desertification, efficient pesticide management and conversion of monocultures to diversified systems.
Actions that contribute to forest-positive agriculture

National Soil Strategy for Sustainable Agriculture*

- Sustainable soil management
- Information and monitoring system
- Education, awareness, and participation
- Research, innovation, development, and technology transfer
- Coordination and cooperation
- Soil governance

Objective: Conservation, restoration and promotion of sustainable soil management for agriculture, food and well-being.

60% Mexican soils present degradation

25% farmers indicate a reduction of soil fertility

70% livestock activities are extensive

Focal points:

- Increase agricultural frontier
- Forest soil compaction

*Strategy currently under development
THANK YOU

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