

RADIOGRAPHY OF ILLEGAL DEFORESTATION IN MEXICO

MegaFlorestais Webinar #2

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MEDIO AMBIENTE
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES



CONAFOR
COMISIÓN NACIONAL FORESTAL



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I. INTERNATIONAL REFERENCES

1. **FAO. Report of the 25 th Session of the Committee on Forestry**

(5-9 October, 2020)

COFO noted the need to Intensify actions to halt deforestation and forest degradation.

Requested FAO to increase understanding of impacts of deforestation and climate change, including on the risk of zoonotic diseases and strengthen plant health related standard settings activities , including through the “One Health” approach.

COFO requested FAO to integrate forestry in FAO work on food systems, promoting synergies and addressing trade offs between forestry and agriculture in initiatives and projects.

Global Forest Summit: Protect faster, restore stronger

(12 March 2021)

- Halting deforestation is the number 1 priority that convokes us all as governments, businesses, international organizations, NGO, projects holders.
- Halting deforestation and reducing our carbon footprint are two major priorities.
- Accounting for 10 % of CO2 emissions, deforestation directly contributes to global warming and affects our climate change capabilities, as forests can absorb up to 30 % of our emissions. Likewise, our adaptation capabilities rely heavily on forests. as they provide ecosystem services helping to face more frequent and more violent catastrophes
- At the **Summit the following measures were recommended** to better and faster address all aspects of the **climate crisis**:
 - Develop **legally binding instruments** to fight deforestation or targeted sanction mechanisms.
 - Increase **corporate responsibility** with full transparency on **supply chains** to fight against imported deforestation.
 - Develop a **more granular approach for net zero ambitions** with net zero commitments at **corporate levels**.
 - Raise awareness among **sectoral market leaders and companies** which can accelerate **rolling out the development of net zero** ambitions in their stakeholders (clients, providers, investors).

II. Case: Mexico

11.1 HARD DATA

Loss of forest cover:

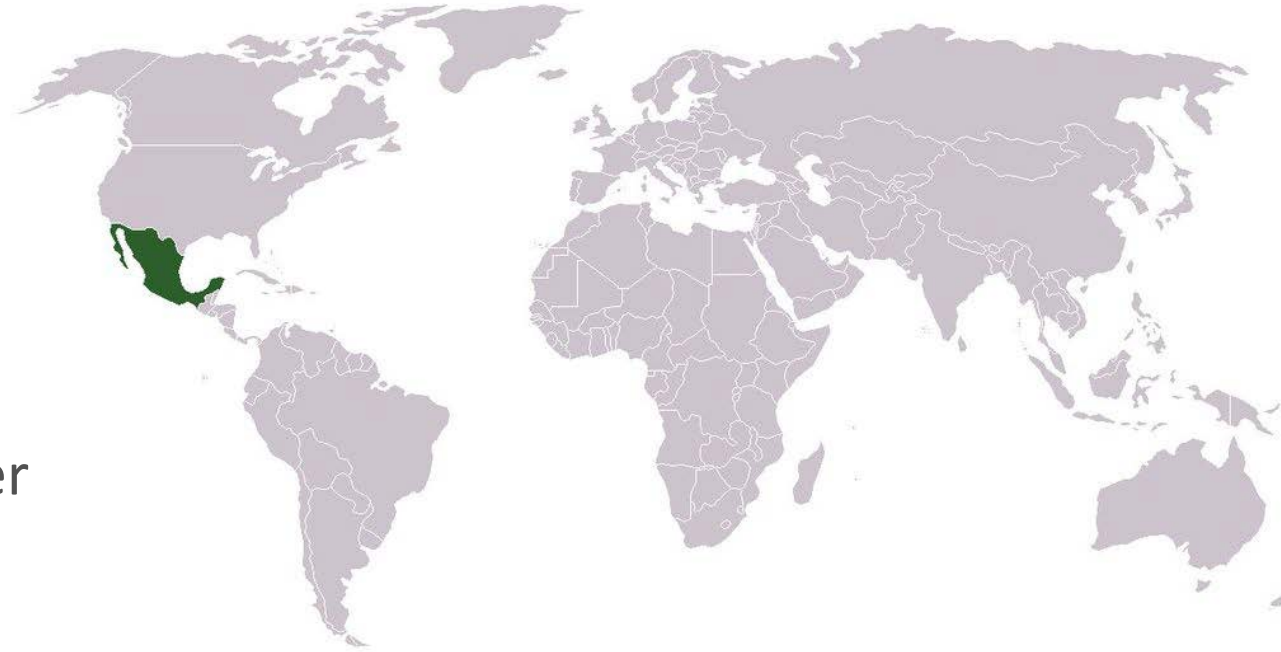
- 212,000 hectares/year (average),
- 95% is illegal,
- Around 2% of the world's total (estimated at 10 million hectares per year).

Ecosystems:

- 41 % of warm-humid rainforests,
- 27% of hot dry forests and
- 15% of cool temperate forests.

Activities:

- 74% for extensive cattle or grazing,
- 18% in subsistence agriculture,
- 2 % in commercial agriculture.



Delimitación de 1,300 hectáreas aproximadamente y preparada para su quema, se anexa a fotografía imagen satelital Sentinel 2^a.

II.2 DRIVERS BEHIND DEFORESTATION

- **Rural development policy** has promoted the distribution of forest lands to the people in the rural territory without providing them the necessary tools for its use; encouraged food production with land clearing programs, and stimulated the colonization of rainforests by farmers with a livestock or agricultural culture.



- Government's tolerance to **land use changes**.
 - **Farmer's culture, predominantly focused on agriculture and livestock** with a predominant use of fire.
 - **Forests are undervalued**, environmental services and biodiversity are often taken for granted.
-

- **Agrarian conflicts** among communities
- **Collective forests** have been **parceled or individualized**.



- **Lack of incentives** for landowners and communities to preserve forests *vis-à-vis* market demand for specific products (meat, dairy products, avocado, palm oil, illicit crops, among others).
- **Inadequate design of sectoral policies**, including perverse subsidies, and disregard for infrastructure, urban development and tourism plans.

- **Lack of organizational and leadership capacities** in communities and ejidos **to carry out a sustainable use of forest resources**, which are aggravated by the growing social fracture, the weakness of local institutions and the lack of territorial governance mechanisms at different levels.
- **Economic revenues from food production exceed those from forestry production.** In addition, subsistence agriculture generates short-term benefits.
- **Agricultural and livestock borders** have not been stabilized *vis-à-vis* forest areas.

En las coordenadas 89°20'9.06"O 19°12'11.05"N en los terrenos forestales (Terrenos Nacionales) cercano al ejido Chan-Yaxché, y núcleos ejidales de Xmabén, Xmejia e Ukum, en seguimiento a 15 puntos de calor detectados por el Sistema de Alerta Temprana de Incendios del 15 de marzo al 11 de abril se encontró lo siguiente: (Imagen 4)

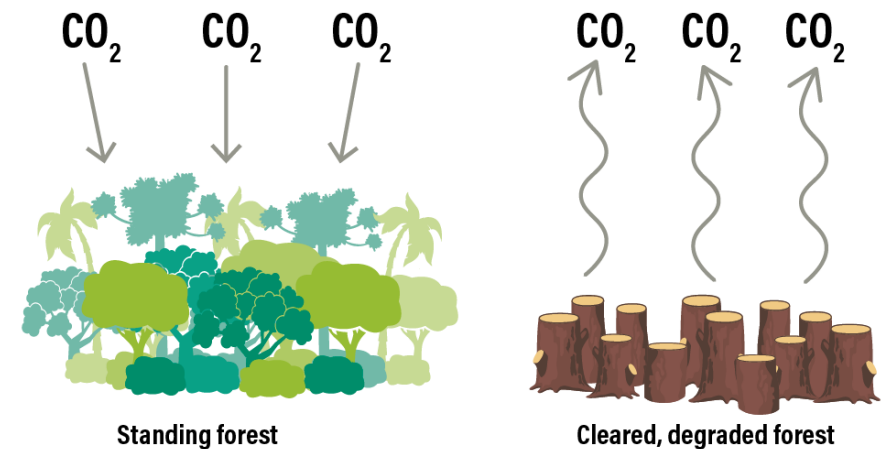


Quema de terrenos cercanos al Ejido Chan-Yaxché

- The negative aspects, especially of commercial agriculture, along with: fires, illegal logging, high water consumption, use of herbicides, impact on human health and biodiversity, stress on wildlife, pollinators, and the participation of organized crime in part of the avocado production business.

II.3 ADDRESSING CLIMATE CHANGE, OPPORTUNITY TO REVALUE FORESTS

- **Of the total gross greenhouse gas emissions, 703 MtCO₂e, deforestation (land use changes) and degradation of forests account for:**
 - **2.8% of the country's total emissions, equivalent to 20 million tons of carbon dioxide equivalent (CO₂e).**
- **Energy, transportation, industrial processes, livestock have the highest values, which are higher than the land sector, namely, the forest sector.**
- **Despite the loss of forest cover, Mexico's forests that remain standing are capable of absorbing 169 million tons of CO₂e = 24% of the country's total GHG.**



PATHS TO MITIGATION

- **Natural regeneration of abandoned land** and reconversion of agricultural lands **to forest lands through restoration.**
 - 2024: 8.7 MtCO₂e
 - 2030: 13.2 MtCO₂e

Almost 20% of the target
 - **Stop deforestation**
 - 2024: 9.3 MtCO₂e
 - 2030: 18.2 MtCO₂e

Almost 30%
 - **Reforestation of the million hectares of the Presidential Program “*Sembrando Vida*” (Sowing Life)**
 - 2024: 1.7 MtCO₂e
 - 2030: 3.2 MtCO₂e

5% of the national commitment
 - **Forest management**, would contribute 16.6 MtCO₂e tons in 2030.

Another 30%

By incorporating areas of natural forests to **commercial forest management**; improving the productivity of forest areas under **commercial timber management**, incorporating new areas of **commercial forest plantations**.
-

- Mexico has acquired national and international commitments to **achieve a zero net deforestation target** by 2030. Aligned with Mexico's **National REDD+ Strategy** (ENAREDD+) and the country's **NDCs**.
- To attain this target, several interinstitutional and inter-sectoral **working groups** (WGs) related to the main drivers of deforestation in Mexico **are being established**. These are comprised by the public sector (federal and subnational representatives), private sector, civil society, academia, and local communities.



Working groups for the implementation of Mexico's REDD+ strategy

1. Coordination of public policies and information instruments to guide the appropriate use of land in rural areas.
2. Transition to sustainable agricultural production schemes without deforestation (integrated land management).
 - 2.1. Avocado and palm oil, regulation and certification with potential to expand it to soy
 - 2.2. Sustainable livestock systems
 - 2.3. Productive landscape restoration
3. Forest Management
 - 3.1. Sustainable Forest Management
 - 3.2. Forest Management in Natural Protected Areas
 - 3.3. Wildlife management and CITES
4. Integrated fire management (agricultural and livestock burning)
5. Attention to Forest Pests and Diseases
6. Capacity building and technical support for integrated land management.
7. Agrarian conflicts
8. Illegal logging and illegal trade.

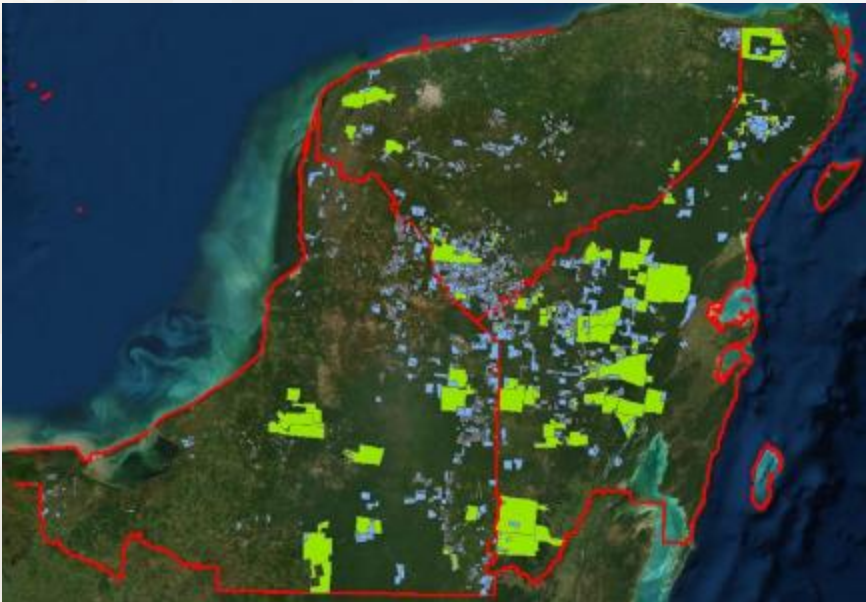
STUDY CASE: YUCATÁN PENÍNSULA

- In 2020, CONAFOR carried out a Case Study, in the **Yucatan Peninsula**, of estimated reduction of CO₂ emissions from gross deforestation associated with the implementation of **CONAFOR's programs (Community Forest Management and Payment for Environmental Services)**.
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**REAL MITIGATION
2012-2019**

12.1 MtonCO₂e were reduced

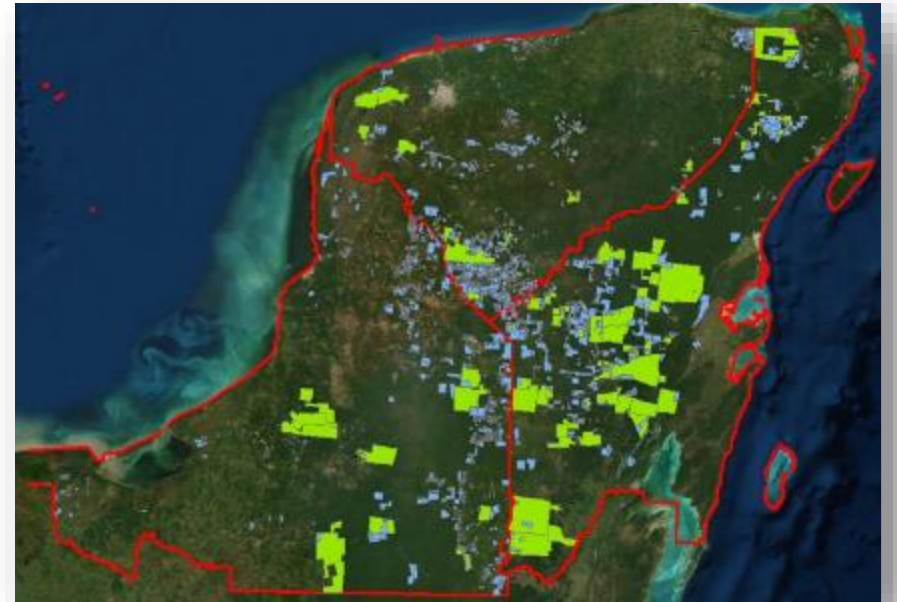
~ 1.5 Mton CO₂e per year



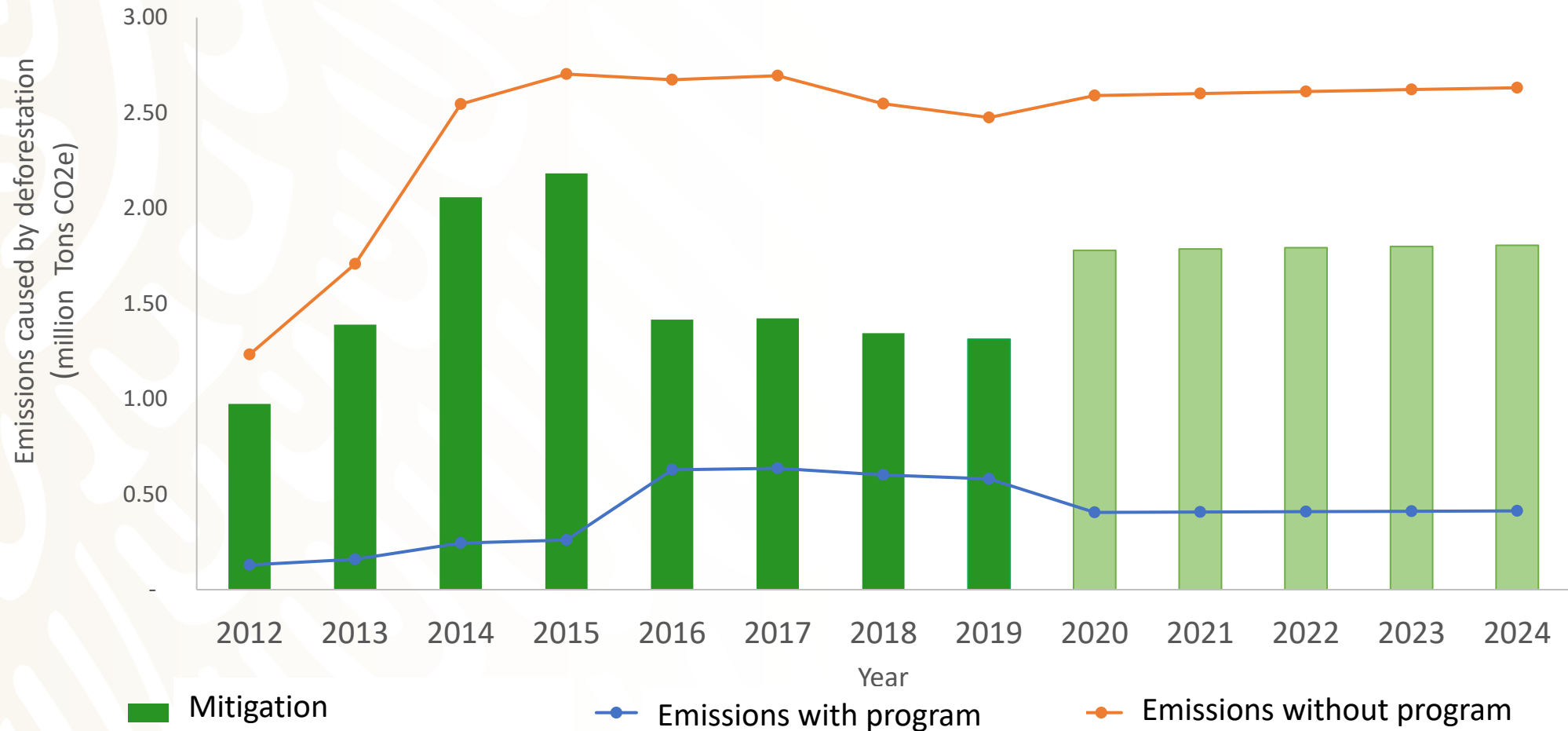
**POTENTIAL MITIGATION
2020-2024**

- 8.9 MtonCO₂e are expected to be reduced.

~1.8 Mton CO₂e per year



MITIGATION: EMISSIONS WITH AND WITHOUT CONAFORS' PROGRAMS



II.4 ACTIONS TO ADDRESS DEFORESTATION AND MITIGATE CLIMATE CHANGE IN RURAL LANDSCAPES

As mentioned, **stopping illegal deforestation requires interinstitutional and inter-sectoral coordination** in the territory as a **fundamental element**, including:

- **Alignment of programs, actions and incentives in the rural territory**, through the strategy of REDD+ Projects.
 - **Articulation of subsidies and incentives** in the rural territory.
 - **Ownership and effective implementation of REDD+ strategy** by relevant sectors and institutions.
 - **Advancement of an integrated territorial management with the institutions of agriculture, environment, forestry, and state governments working in alignment in their policies and support programs.**
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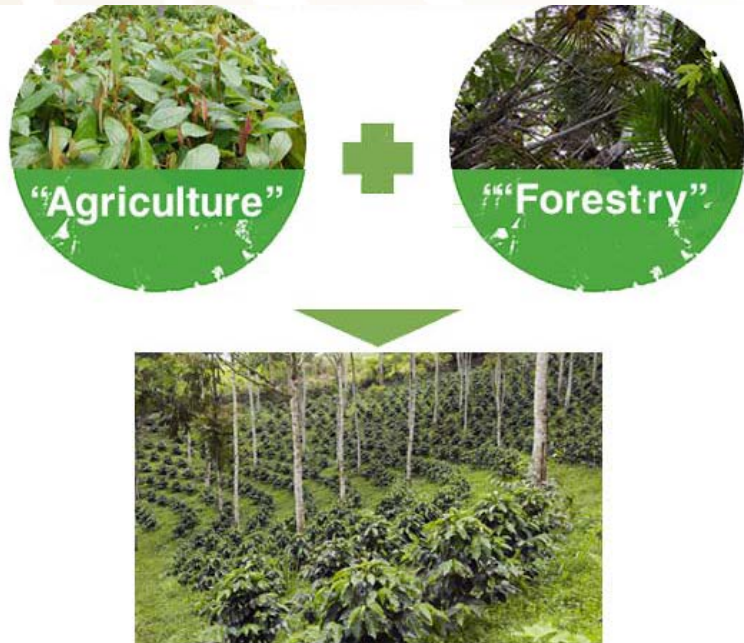
In Mexico, interinstitutional and inter-sectoral coordination are being promoted, with greater political impetus, since 2019.

However, there is still a long way to go to align programs, actions and incentives in the rural territory in coordination with the relevant institutions at the different levels of government (national/local).

Mexico's National Forestry Commission is committed to:

- **Implement the REDD+ strategy**, working to promote that other relevant institutions take ownership of the strategy.
 - Foster **wildfires' prevention, promoting the enforcement of penalties, including criminal law.**
-

Additionally, to stop deforestation in agricultural activities, it is relevant to:



- **Increase the productivity of agricultural activities per unit area** instead of expanding areas at the expense of forests and rainforests.
- **Promote productive reconversion strategies in the rural landscape**, based on **agrosilvopastoral systems**, management of *acahuales* (secondary vegetation), systematic slash-and-burn management, to stop the expansion of the agricultural border and **offer productive alternatives to farmers** who develop them.

Case of Leonel Ibarra, a farmer of organic soybean in Sinaloa, Mexico

- "How is it possible that we are poisoning plants, what we produce and we are giving to our children? Here, we are making a more organic production, with microbiology, with organic acids and with leachates."

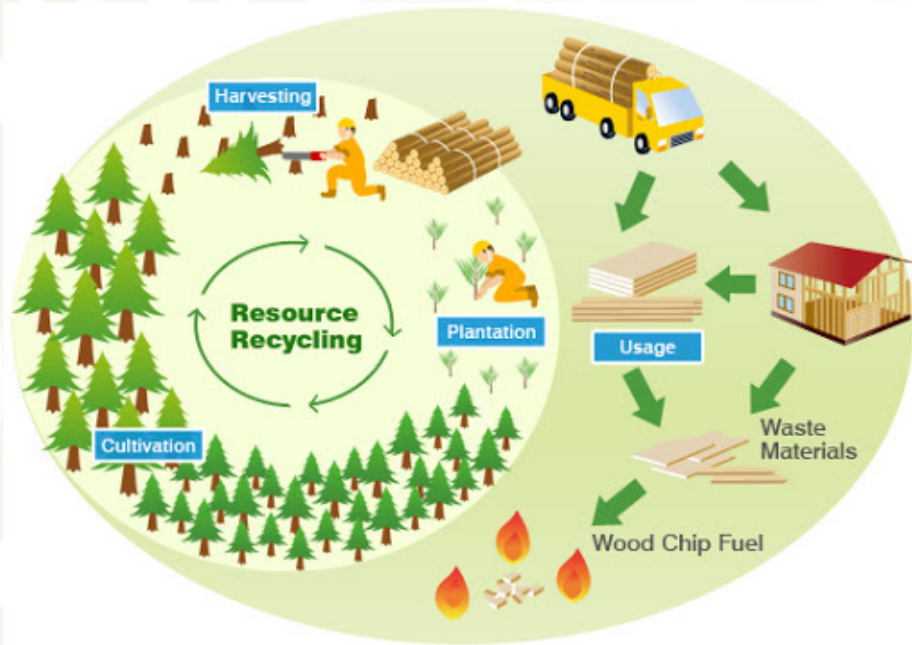
I was asked. Why organic certification, why did you do it?

- I did it out of love, out of love for my children, my grandchildren, all of my descendants. These are things we have to do to remove all the poison from the food we eat. We do not throw poison or glyphosate. Besides, I incorporate the rest herb to the soil, we have improved seeds from the region, we do conservation tillage, nothing moves, the weeds will gradually disappear".

Case of the Local Livestock Association of El Limón

The Association was recognized in 2020 by CONAFOR for increasing the productivity, sustainability and resilience of livestock systems while conserving the natural resources of the municipality of El Limón. The Association was awarded the National Forestry Merit Award. They practice regenerative grazing and preserve their dry rainforests.

Likewise, to stop deforestation in forestry activities, it is important to:



- **Improve th** sustainable forest management and areas with payment for environmental services.
- Have a **simplified legal and administrative framework** that facilitates the incorporation of areas to sustainable forest management.
- **Reduce the costs** of logging and transporting forest raw materials.
- **Integrate value chains** and forest production chains.
- **Diversify sustainable productive activities** in forest ecosystems.
- There are cases that report a positive effect between community forest management and the conservation of forest areas, there is even a lower rate of deforestation compared to National Protected Areas.

More so, to increase carbon stocks, it is essential to:

- Improve silviculture, to increase natural regeneration and the growth rate.

Also, to expand carbon sinks, it is critical to increase:

- Reforestation.
- Mangrove restoration.
- Commercial forest plantations.
- Agroforestry and silvopastoral systems.
- Promote carbon markets as an economic diversification strategy.





In order to **reduce forest degradation**, it is key to:

- Protect forests against illegal logging, fires, pests and diseases, problems that are increasing with climate change.
- Maintain carbon storage.
- Replace construction materials.
- Generate energy with forest biomass



At the international scope:



- International technical and financial cooperation
- **Stop exports and imports of products that are linked to deforestation.**
- Proposal of Amendment of the Work Plan for the **export of Hass avocados** from Michoacán, Mexico to the U.S.
 - In Mexico, a joint effort is being made between the environmental and agricultural sectors, within the framework of a Work Plan for the export of Hass avocados from Mexico to the United States of America, with the aim of ensuring that avocado production is carried out without detriment to forest ecosystems.

III. Final messages

1. The loss of **forest ecosystems** is **gradually reducing their capacity to sequester and store atmospheric carbon**, and to offset greenhouse gas emissions from other sectors.
2. **Avoiding deforestation and forest degradation** is the **most effective** short and medium-term measure to contribute to the **mitigation of climate change** by achieving Nationally Determined Contributions (NDC) targets.
3. Achieving the **mitigation goals** established in the NDC **requires concerted actions** among institutions and sectors, based on a strategy to promote a sustainable, resilient and low-carbon rural development.
4. Sustainable management, protection, conservation and restoration of forest ecosystems are actions that contribute directly to climate change mitigation.



5. It is **essential** to have **local communities and indigenous peoples** as the **main actors in the design** of land use policies through continuous dialogue and guidance.
6. **Revalue the forestry sector for its contributions to climate change, social wellbeing and to Mother Earth.** And give consistency and continuity to public policies and relevant institutions.
7. Promote **models of subsistence agriculture and livestock production** and **responsible agro-industry certified** at the origin and in the supply chain free of deforestation.
8. Not to compete with agribusinesses but to **articulate and harmonize public policies** in a coordinated manner between sectors and with producers.



THANK YOU!



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