



COMISIÓN NACIONAL FORESTAL

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SECRETARÍA DE  
MEDIO AMBIENTE Y  
RECURSOS NATURALES



# Payment of Environmental Services Provided by Tropical Forests: experiences from México

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CONAFOR - Mexico

International Conference on Sustainable Development of Non-Timber  
Forest Products and Services  
Beijing, China, 26 – 28 September 2007

- In the term 1990 - 2000 the annual rate of deforestation in Mexico was of 0.52% (348,000 Ha), and in the term 2000 – 2005 was 0.40 % (260,000 Ha) (FAO, 2007).
- High level of reduction of the forest environmental services (1/2 less of hydrological regime regulation).
- The 2 main influences in Mexico:
  - Costa Rica, Central America Experience.
  - World Bank Experience.
- Pilot process of FIDECOAGUA in Coatepec, Veracruz

## STRATEGIC FORESTRY PROGRAM 2025 (PEF 2025)

The PEF2025 includes objectives and strategies aimed at developing the market, favoring valuation and defining the property rights of environmental services in Mexico.



## NATIONAL FORESTRY PROGRAM 2001-2006 (PNF 2001-2006)

The PNF 2001-2006 makes an analysis of environmental services to visualize at a later date what objectives, strategies and lines of action should be followed to develop environmental services.

- According to the **General Law on Sustainable Forest Development**, the **National Forest Commission (2003)** has specific authority in the development of mechanisms for environmental goods and services collection and payments;



- The **Mexican Forest Fund** backs projects that contribute to the integration and competitiveness of the production chain, and develops mechanisms for environmental goods and services collection and payments;

# Legal Tools



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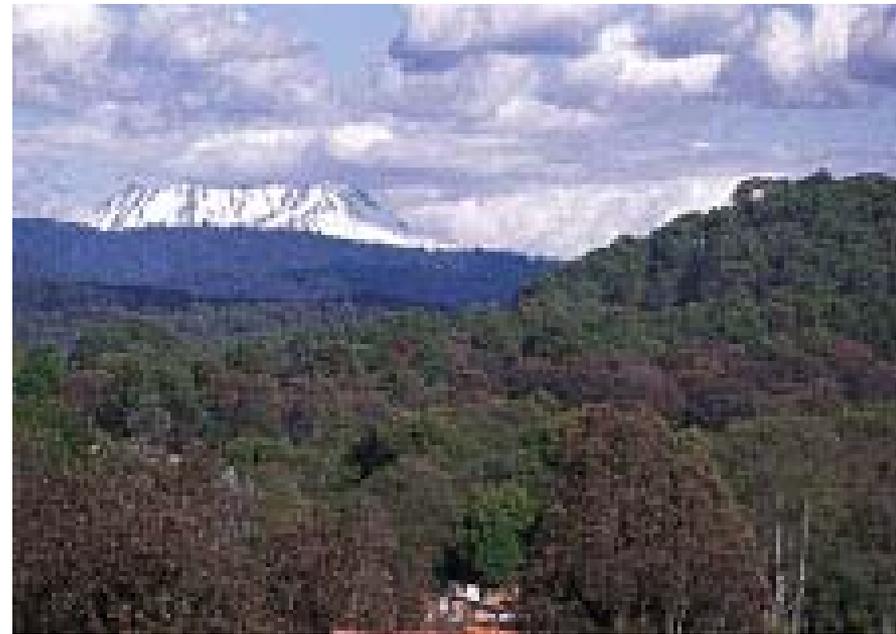
- The **Federal Tax Act** provides in subsection A, Article 223 the specific allocation of part of the income collected from the use, development and operation of federal waters to the Mexican Forest Fund for the development and operation of environmental service payment programs.

- The **Operating Rules** for the payment of hydrological environmental services was opening on 2003.



## The Operating Rules in the June 18, 2004 Federal Gazette (DOF):

Pursuant to Article 10 of the operating rules published in the Federal Gazette on October 3, 2003 and the amendment resolution published in the Federal Gazette on June 18, 2004, the following technical criteria were taken into account to determine the potential eligible surface area in 2004:



# Technical Criteria for Eligible Areas



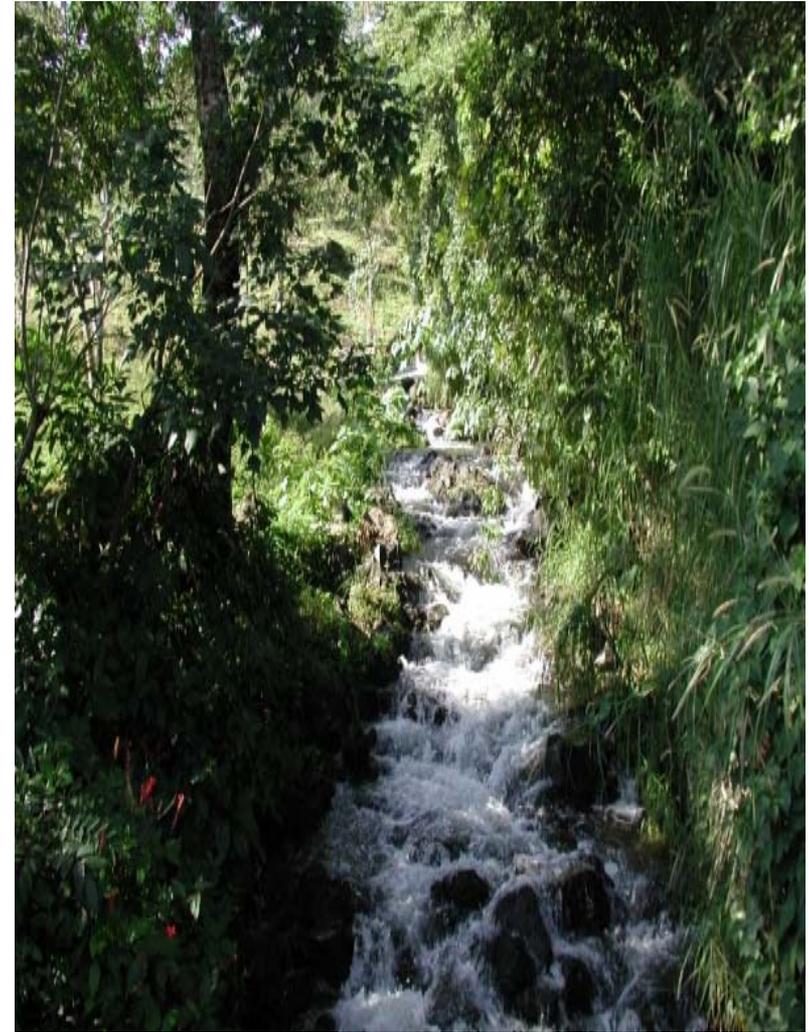
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- The entire lot must have a forest canopy of 80% or more.
- It must be located in a critical groundwater recharge area according to the National Water Commission Resolution published in DOF on January 31, 2003.
- It supplies water to towns or cities with more than 5,000 inhabitants.
- It is on the priority mountain list (Attachment 2, Environmental Service Payment Operating Rules)
- It is within a Protected Natural Area

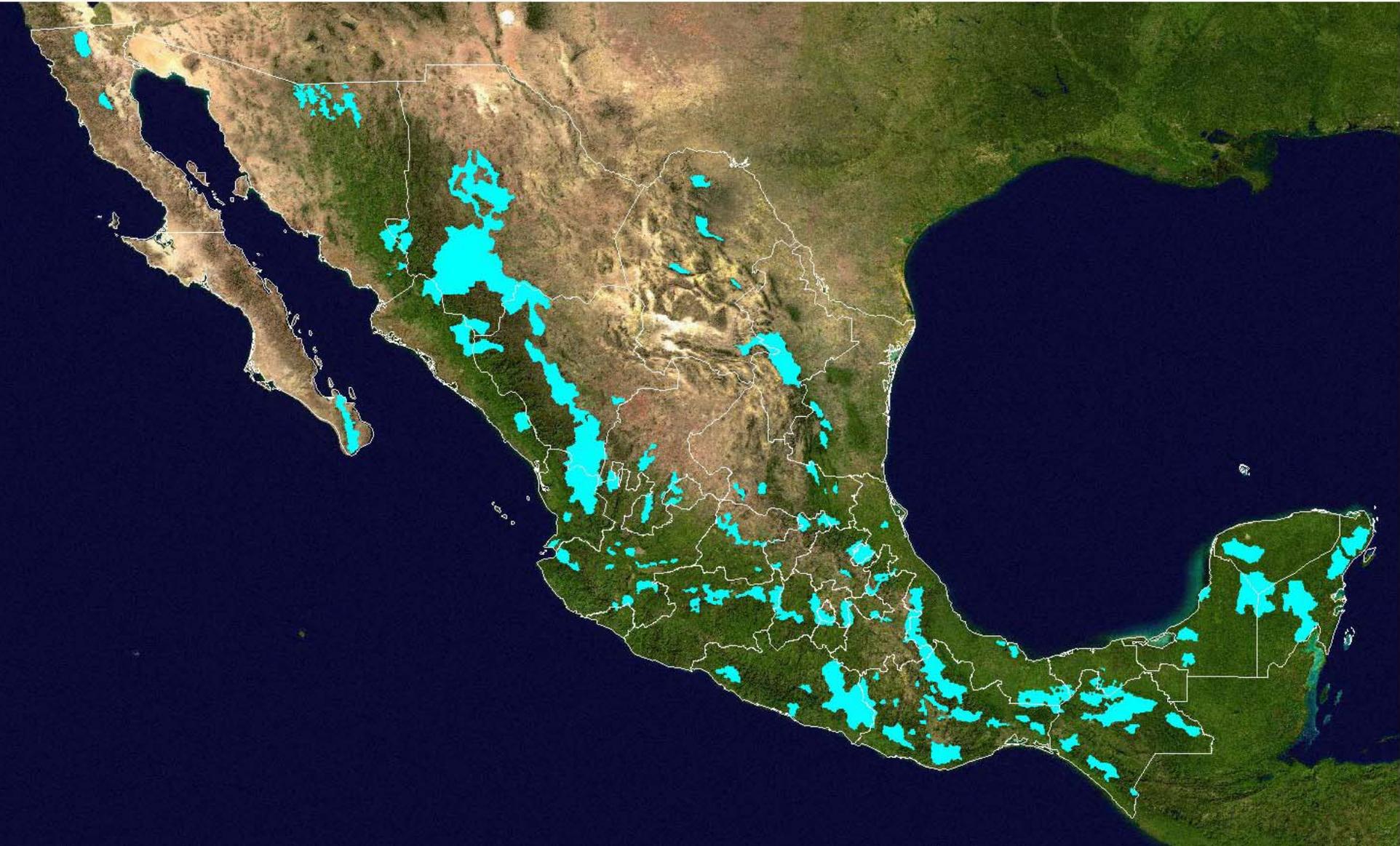


A Geographical Information System was created for the selection of the eligible areas in the program. The use of the digital thematic cartography in victories format was very useful. The scale is 1:250,000.

<b>Payment concept</b>	<b>Eligible Surface (hectares)</b>
<b>Hydrological</b>	<b>21'054,229</b>
<b>Protection of Biodiversity</b>	<b>47'190,818</b>
<b>Agroforestry Systems</b>	<b>47'478,735</b>
<b>Patrimonial Fund for Biodiversity</b>	<b>3'798,432</b>

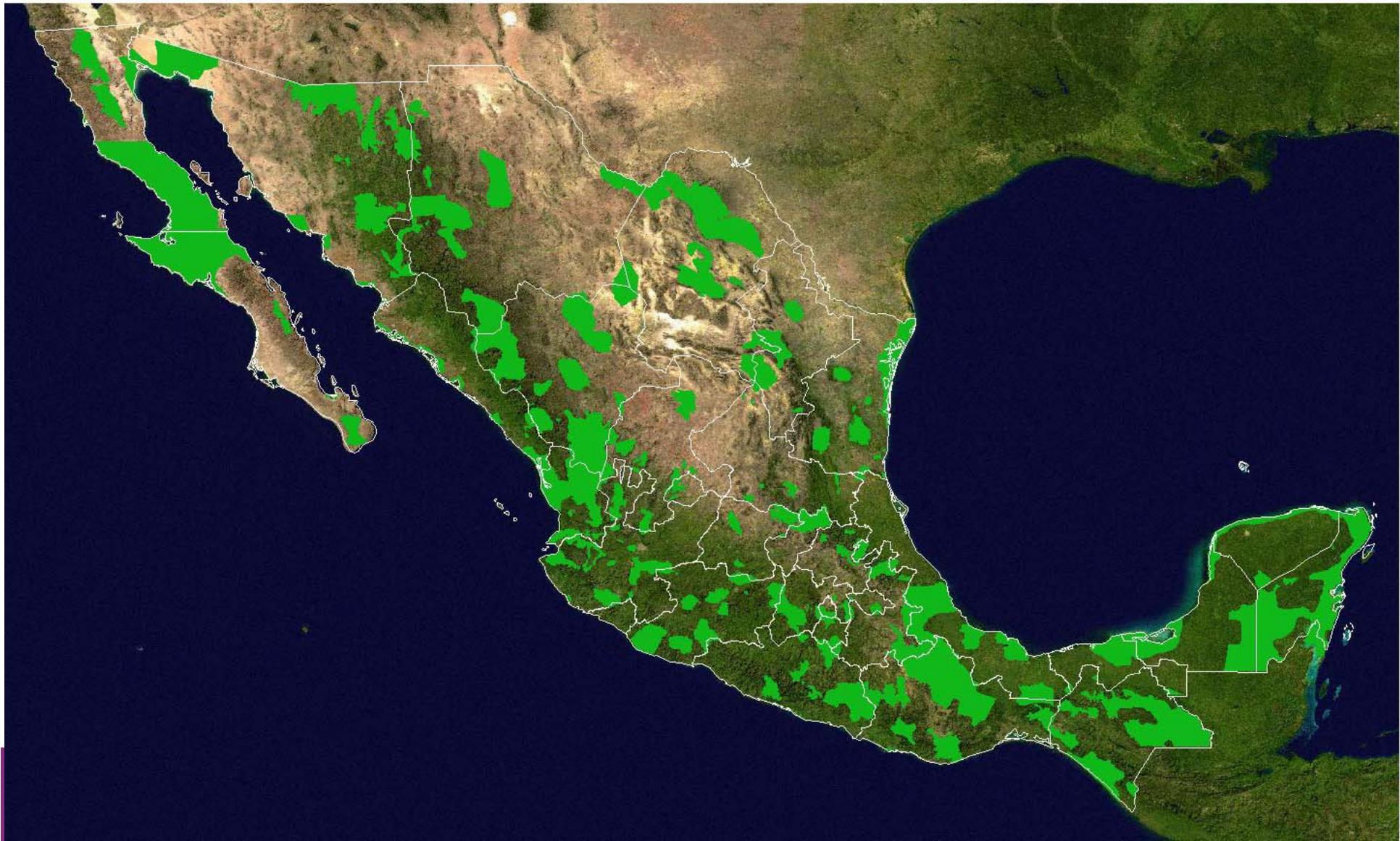
# Eligible Areas

Hydrological Services: 21.05 million hectares



# Eligible Areas

Protection of Biodiversity: 47.19 million hectares



# Eligible Areas

Agroforestry Systems: 47.47 million hectares





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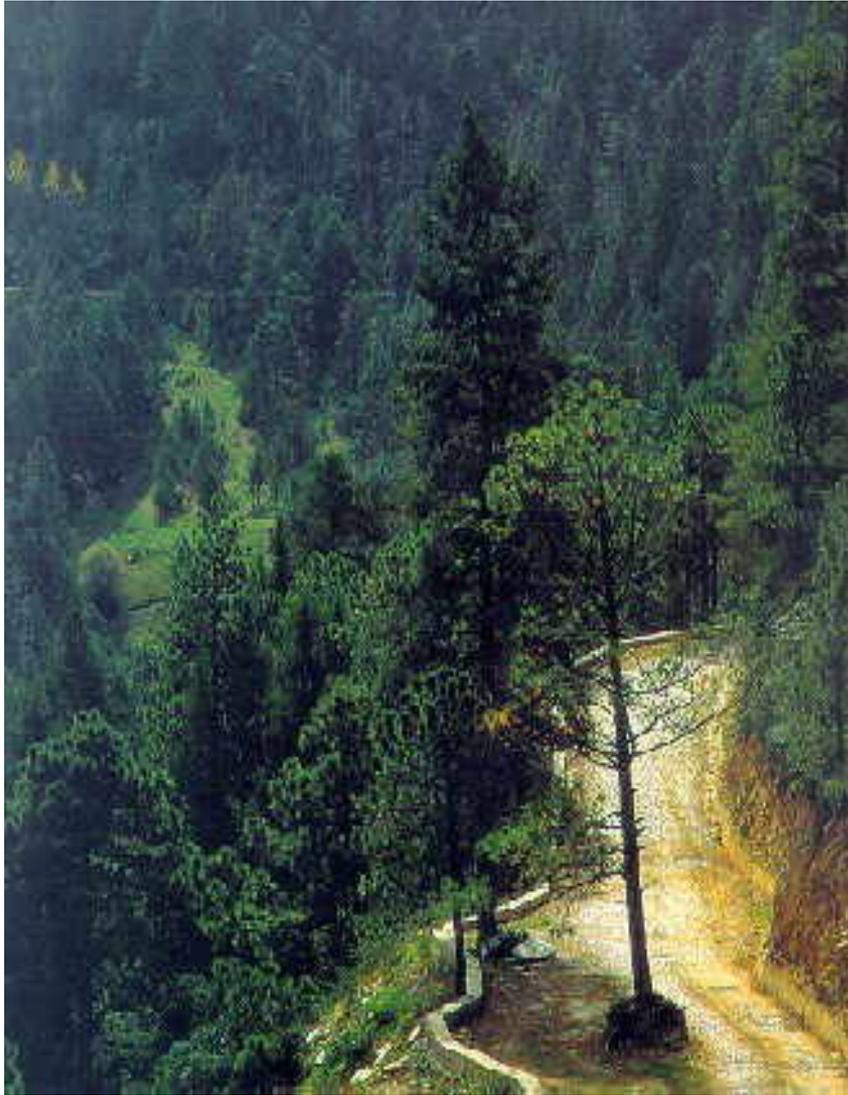


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# Patrimonial Found for Biodiversity: 3.79 million hectares





The following is considered when selecting beneficiaries:

- The proposed surface area must not be greater than 4,000 hectares or less the 50 hectares.
- It has a forest canopy of 80% or more.
- The recovery or idle areas under forest management must not exceed 200 hectares per beneficiary.
- The areas proposed by agricultural groups must be approved at a legal meeting.
- The proposed areas must not have legal problems.

# ***Carbon Sequester, Biodiversity and Agroforestry Environmental Service Payments***

- During 2004, SEMARNAT will publish the operating rules for ES payments for Carbon Sequester and Biodiversity Protection for 5 million US dollars.
- SEMARNAT will also publish the operating rules for ES payments for agroforestry crops in the amount of 5 million US dollars.
- The total investment to pay for ES during 2004 was 40 million US dollars, including 300 for Hydrological ES payments.
- By 2005, all these ES payment programs operated under one set of Rules.



A National Committee will be established that will be presided over by the General Director of CONAFOR and have legal representatives of the following institutions:

- National Water Commission (CNA),
- National Commission for Protected Natural Areas (CONANP),
- National Ecology Institute (INE)
- From the National Forest Council: one from the social sector and another from the private sector.

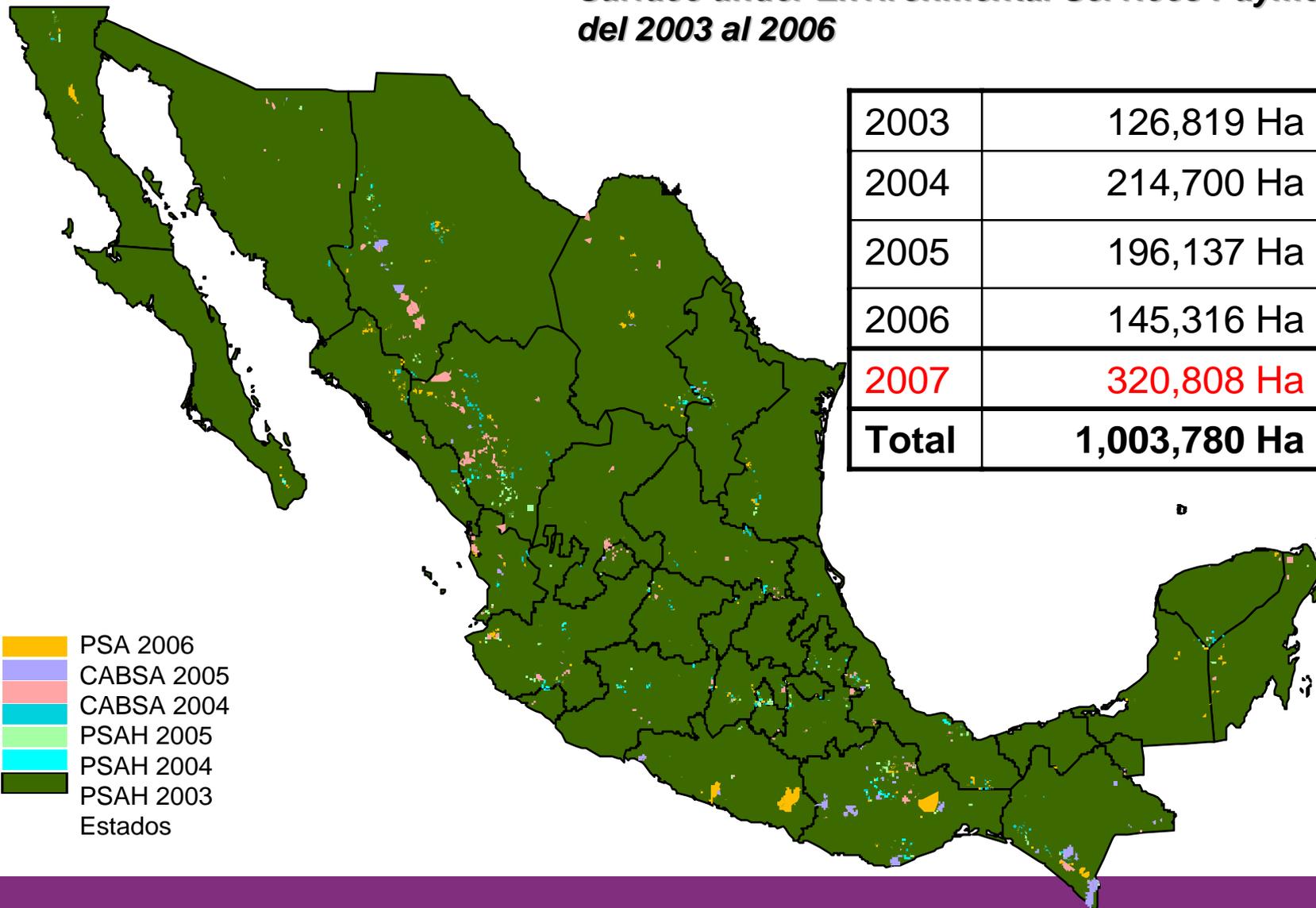




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## Surface under Environmental Services Payments del 2003 al 2006



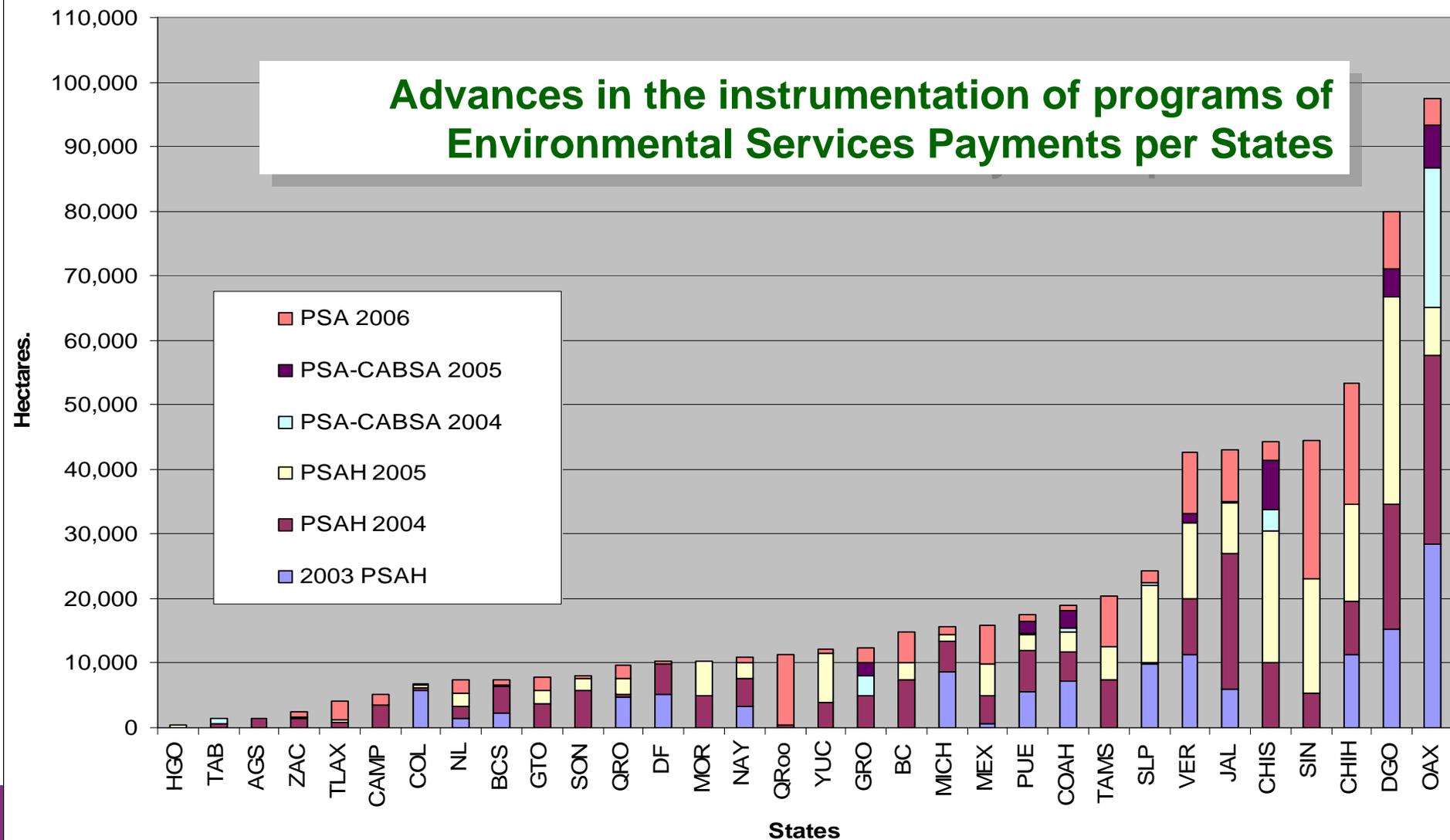
2003	126,819 Ha
2004	214,700 Ha
2005	196,137 Ha
2006	145,316 Ha
<b>2007</b>	<b>320,808 Ha</b>
<b>Total</b>	<b>1,003,780 Ha</b>

- PSA 2006
- CABSA 2005
- CABSA 2004
- PSAH 2005
- PSAH 2004
- PSAH 2003
- Estados



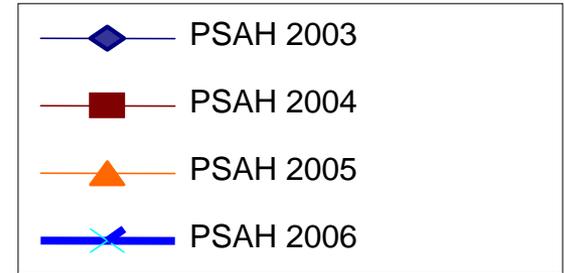
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## Advances in the instrumentation of programs of Environmental Services Payments per States

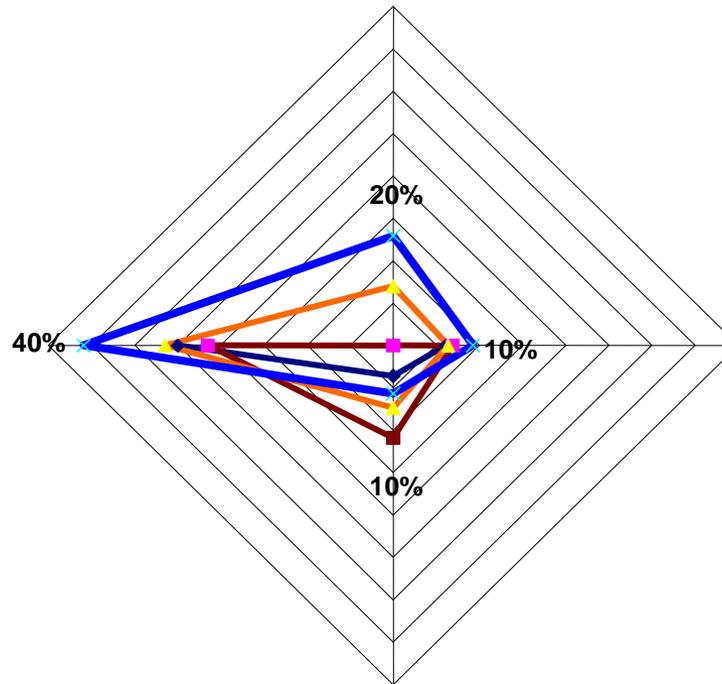


# Focus Analysis of the Payments 2003 to 2006

## Critical groundwater recharge areas



*High levels of Poverty*



*Water shortage zones*

*High risk of deforestation*

# Other Initiatives



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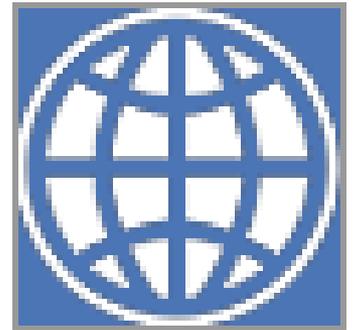
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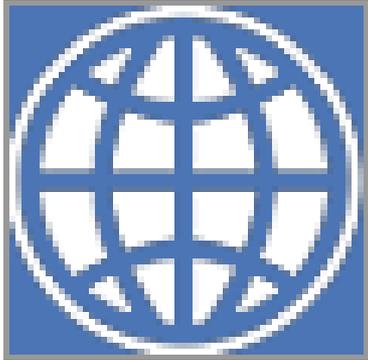
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Appraisal of HES. Providers	3	Tropical
Appraisal of HES. Municipalities	3	Arid and Tropical
Appraisal of HES and other ES. Users	3	Tropical and temperate
Appraisal of BES. NGO in Social lands	6	Tropical and Arid
Appraisal of BES. Communal owners	3	Tropical
Appraisal of BES. Protected Natural Areas	3	Temperate, Tropical and Arid
Appraisal of LB-ECOT. Private	3	Tropical
Appraisal of LB-ECOT. ONG	3	Arid and Tropical
Appraisal of LB-ECOT. Communal owners	5	Temperate and tropical
Appraisal of CCES. Communal owners	4	Tropical
Others	4	Temperate and Arid

***For the purpose of making the Environmental Service Payments financial system sustainable and of guaranteeing the existence of the forest regions that provide them:***

- **Donation to Prepare the Project**
  - 515 thousand dollars from the Japanese Government
- **Forest Environmental Service Project for 95 million dollars:**
  - GEF donation for 15 million dollars
  - World Bank Credit for 52 million dollars
  - Federal Government funding for 28 million dollars
- **Aimed at enhancing government administration in Forest Environmental Service issues:**
  - Improvements to the PSAH Program
  - Jumpstarting an ES payment market for biodiversity
  - Making business plans to sequester carbon and scenic beauty





- **Project Components**
  - Promoting environmental services markets; developing the legal framework and public awareness
  - Improving the Hydrological Environmental Services Payment Program
  - Payment of Biodiversity Environmental Services
  - Development of pilot programs with built-in Environmental Service Payments
  - Monitoring and Evaluation
- **Next Steps:**
  - Logical Framework Workshop (June, Coatepec, Veracruz)
  - Environmental Services Information Workshop (Expo Forestal)
  - Public consultations to validate the creation of new Environmental Services procedures (July through December)
- **Credit Operations: 2006 - 2009**



- The Mexican payment of environmental services program has been result an useful form to add value to the forest.
- The program is in a transitional process and must be reduce the governmental economic resources income and increase the society economic resources.
- It must be necessary to develop better and more competitive financial mechanisms.
- It is necessary to develop better monitoring and assessment process.
- The program needs to develop models that permit to value the environmental services, still when the forest is under management.
- Some external factors that is necessary take in account are: land tenure, burocracy, complicate models, and transparency.



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