

DOCUMENT I

**PRIORITY TOPICS AND SUB-TOPICS** FOR MEXICO'S  
NATIONAL PORTFOLIO OF PROJECTS TO BE FINANCED BY  
THE GLOBAL ENVIRONMENT FUND (GEF) FOR THE PERIOD  
2011-2014

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## A. BIODIVERSITY FOCAL AREA

### A.1. Topics approved for the focal area on Biodiversity

1. Protected natural areas
2. Economy, trade, and incentives
3. Sustainable use of biodiversity
4. Monitoring and indicators
5. Invasive species
6. World strategy for conservation of plant species
7. Climate change and biological diversity
8. Access to genetic resources and benefit sharing

### A.2. Sub-topics of each topic for selection of projects in the focal area on biodiversity

#### 1. Protected areas

- a) Increase in the number and area of Protected Natural Areas (PNAs), considering elements such as priority regions for conservation, gap analysis, and climate change.
- b) Expansion and improvement of connections between PNAs (through biological corridors).
- c) Community participation, diversification of production, and sustainable use in PNAs.
- d) Restoration of ecosystems in PNAs.
- e) Recovery of endangered species in the PNAs and their area of influence.
- f) Prevention, control, and eradication of invasive exotic species in PNAs.
- g) Improved resilience of ecosystems in PNAs in the face of negative impacts such as climate change.
- h) Strengthening of the capacity for management of the PNAs.
- i) Development and strengthening of information and monitoring systems for management of the PNAs.
- j) Development and strengthening of sustainable financing systems for federal, state, and municipal PNAs and areas voluntarily set aside for conservation in Mexico.

#### 2. Economy, trade, and incentives

- a) Internalization of externalities.
- b) Creation and strengthening of markets and production chains of biodiversity-based goods and services.
- c) Certification of management and biodiversity-based products, goods, and services.
- d) Reduction of market failures (asymmetrical information)
- e) Incentives and valuation methods including transformation of incentives harmful to biodiversity.
- f) Economic assessment of biodiversity-based goods and services and their contribution to national accounts.
- g) Contribution of economic and trade aspects in the implementation of the Nagoya Protocol.

#### 3. Sustainable use of biodiversity

- a) Promotion and dissemination of best practices for sustainable biodiversity and services provided in the rural sector (primary sector: ranching, forestry, farming, hydroponics, and fishing).
- b) Strengthening of the administration and sustainable management of wildlife and ecosystems.
- c) Development of innovative practices for the administration and sustainable use of biodiversity and the services provided, including ABS, production diversification, and the search for value added.
- d) Strengthening of the communities' capacity for sustainable use of biodiversity.

4. Monitoring and indicators
  - a) Development of indicators and information systems for monitoring biodiversity (status, threats, administration and management of species and ecosystems).
  - b) Creation and strengthening of monitoring capacities.
  - c) Integration and harmonization of information and monitoring systems.
  - d) Use of the information for decision-making.
  
5. Invasive species
  - a) Strengthen the prevention, detection, and reduction of the risk of introduction of invasive exotic species.
  - b) Contribute to the upgrading of the policy and the legal and regulatory framework in the area.
  - c) Development of scientific, technical, human, and institutional capacities.
  - d) Identification and prioritization of high-risk invasive exotic species and vulnerable areas.
  - e) Programs for control and eradication of invasive exotic species in priority areas inside and outside of the PNAs.
  - f) Dissemination, education, and awareness building for the general public.
  - g) Strengthen coordination among governments and agencies, and with society.
  
6. Global Strategy for Plant Conservation
  - a) Generate missing information on key subjects and disseminate it to support decision-making.
  - b) On-site conservation of priority species of flora in protected natural areas, biological corridors, wildlife conservation management areas, and off-site conservation activities in botanic gardens and nurseries.
  - c) Restoration and recovery of flora in different ecosystems.
  - d) Prevention and control of threats to plant diversity.
  - e) Promotion of sustainable use of plant diversity, including schemes to diversify production and integrated management of ecosystems.
  - f) Review and updating of the legal framework on the subject.
  
7. Climate change and biodiversity
  - a) Restoration of ecosystems for adaptation to and mitigation of climate change.
  - b) Aided adaptation for recovery of at-risk species.
  - c) Promotion of linkage for comprehensive integrity and resilience of ecosystems confronted with climate change.
  - d) Mitigation of threats to biodiversity, especially for ecosystems vulnerable to climate change, such as the coastal zone.
  - e) Modeling of the effects of climate change on biodiversity and ecosystems.
  - f) Adaptation strategies based on ecosystems.
  - g) Contribution of biodiversity, conservation, and sustainable use in the adaptation to and reduction of climate change's negative impacts.
  - h) Programs of adaptation to climate change in PNA complexes where these have not been carried out (on land: forests of mixed pine and oak, dry forests, xerophytic scrub; on the maritime coast: Gulf of California, Gulf of Mexico, Pacific Ocean).
  
8. Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) including the Nagoya Protocol
  - a) Increased awareness building on the importance of genetic resources and related traditional knowledge through activities with indigenous, corporate, and scientific communities, etc.

- b) Evaluation and updating of the existing legal framework for implementation of the Nagoya Protocol, including points of verification such as creation, installation, and maintenance of an information system.
- c) Evaluation and strengthening of the existing capacity of competent national authorities for implementation of the Nagoya Protocol.
- d) Creation of capacities and involvement of various interested stakeholders, especially indigenous and local communities, in order to achieve the Nagoya Protocol's objective.

## **B. FOCAL AREA ON LAND DEGRADATION (DESERTIFICATION AND DEFORESTATION)**

### **B.1. Topics approved for the focal area: Land Degradation (desertification and deforestation)**

1. Promotion of informed awareness about and shared responsibility for Sustainable Land Management (SLM).
2. Stimulus for integrated land-use planning.
3. Institutional coordination and harmonization of policies, promotion of mutually responsible participation, with inclusiveness and gender and ethnic equity.
4. Generation and dissemination of information for Sustainable Land Management.
5. Strengthening of research and transfer of best practices in land use management.
6. Strategies for financing sustainable land management.

### **B.2. Sub-topics of each topic for selection of projects in the focal area on Land Degradation (desertification and deforestation)**

1. Promotion of informed awareness of and shared responsibility for Sustainable Land Management (SLM).
  - a) Linkage of environmental education SLM actions with the National Environmental Education Strategy for sustainability and other education and training instruments; preparation of environmental education programs on degradation and sustainable land management; promotion of the use of information and communication technology for environmental education and training in SLM.
  - b) Inclusion of sustainable land management in federal, state, and municipal training strategies.
  - c) Training in SLM practices and training for sectors not specializing in the area to facilitate the understanding and promotion of SLM.
  - d) Design and implementation of a communication program on SLM through interagency coordination involving the three levels of government.
2. Stimulus for integrated land-use planning
  - a) Strengthen capacities for land-use planning.
  - b) Encourage integrated land-use planning.
  - c) Upgrade institutional arrangements and policies for planning.
3. Institutional coordination and harmonization of policies, promotion of mutually responsible participation, with inclusiveness and gender and ethnic equity.
  - a) Evaluation and improvements for coordination, consistency, and harmonization of policies.
  - b) Strengthening of the legal and regulatory framework.

- c) Concerted federalization and decentralization.
  - d) Design and strengthening of mechanisms to promote citizen participation.
4. Generation and dissemination of information for Sustainable Land Management.
- a) Generation and dissemination of information.
  - b) Economic assessment of the effects of land degradation, desertification, and drought.
5. Strengthening of research and transfer of best practices in land use management.
- a) Research to expand the knowledge base on land degradation.
  - b) Testing and generation of technology transfer mechanisms.
  - c) Encourage environmentally friendly production, recycling, and production diversification.
6. Strategies for financing sustainable land management.
- a) Design of integrated financing strategies at the national, district, municipal, and community levels.
  - b) Compensation and payments for environmental services.
  - c) Inclusion of SLM in loan operations and financial risk management.

## C. FOCAL AREA ON CLIMATE CHANGE

### C.1. Topics approved for the focal area: **Climate change**

1. Encourage and implement research and investment in clean technologies with low carbon footprint to guarantee energy security.
2. Increase understanding of the mitigation potential, emission sources, and energy resources in Mexico.
3. Generation of information and technological development on diversification of energy sources.
4. Encourage the production and sustainable use of biofuels.
5. Energy efficiency and use of renewable or clean energy sources such as cogeneration.
6. Energy saving in the transportation, tourism, commercial, housing, and public administration sectors.
7. Reduction of GHG emissions in the energy generation and use sectors.
8. Carbon capture and storage.
9. Opportunities for abatement of fugitive emissions (methane, nitrous oxide, and CFCs).
10. Encourage sustainable agricultural practices.
11. Reduce pressure on forest zones.
12. Conservation, recovery, enrichment, and management of carbon deposits.

### C.2. Sub-topics of each topic for selection of projects in the **focal area on climate change**.

1. Encourage and implement research and investment in clean technologies with low carbon footprint to guarantee energy security.
  - a) Sustainable use of natural resources in energy sector processes.
  - b) Local development and adoption of clean technologies.
  - c) Technology sharing and capacity building.
  - d) Diversify primary energy sources through the incorporation of renewable energy sources.
2. Increase understanding of the mitigation potential, emission sources, and energy resources in Mexico.
  - a) Inventory of greenhouse gases.
  - b) National inventory of renewable energy resources.
  - c) Evaluation of technically feasible and financially viable resources.
  - d) Identification and promotion of clean and renewable energy sources for selective application of technology.
3. Generation of information and technological development on diversification of energy sources.
  - a) Development of models to improve the performance of clean technology application.
  - b) Identification of gaps in technical skills and technology.
  - c) Research and capacity building.
  - d) Development of technological paths for mitigation, identifying clean and renewable technologies.
  - e) Demonstration, use, and transfer of innovative technologies with low carbon emissions.
  - f) Sectoral Measurement, Reporting, and Verification (MRV).

4. Encourage the production and sustainable use of biofuels.
  - a) Development of a bioenergy market for incorporation in the mix of transportation fuels.
  - b) Development and use of biogas in anaerobic processes.
  - c) Development of an integrated chain for production and use of biofuels.
  
5. Energy efficiency and use of renewable or clean energy sources such as cogeneration.
  - a) Adoption of efficient technologies and best practices.
  - b) Incentives for the public to adopt efficient technologies.
  - c) Capture the total potential for cogeneration in PEMEX and the industrial sector, in business, and in the sugar mills.
  - d) Generation distributed with renewable energy.
  - e) Cost-efficient options for bringing electricity to marginal populations.
  - f) Increase the use of autogeneration and autosupply with renewable energy.
  - g) Generation of electricity with wind, geothermal, hydraulic, minihydraulic, wave motion, and solar energy sources.
  - h) Use of solar energy for water heating.
  - i) Generation of electricity with low-carbon technologies.
  
6. Energy saving in the transportation, tourism, commercial, housing, and public administration sectors.
  - a) Issuance of energy efficiency regulations.
  - b) Development of a regulatory framework.
  - c) Efficiency standards to increase the performance of the vehicle fleet.
  - d) More detailed information on the mitigation potential.
  - e) Tapping the emission reduction potential by applying energy efficient measures in transportation, lighting, construction, industrial motors, home equipment and appliances, and water pumps.
  - f) Reduce the energy and water demand of the tourism sector.
  - g) Stimulate the substitution and complementarity of conventional energy sources in hotels with renewable sources.
  
7. Reduction of GHG emissions in the energy generation and use sectors.
  - a) Supplement regulatory instruments that promote use of clean technologies in generation.
  - b) Strengthen programs for management and disposal of waste generated by companies in the sector.
  - c) Increase the use of associated gas and eliminate or reduce the burning and venting of gas.
  - d) Develop energy efficiency projects to reduce GEG emissions in the National Electric System (SEN).
  - e) Use cutting-edge technologies to manage the electric demand (networks and smart meters).
  - f) Develop and implement operational improvement programs to identify and close performance gaps systematically.
  
8. Capture and storage of carbon
  - a) Capture, storage, use, and injection of CO<sub>2</sub> and other gases from electric and industrial sector emissions.
  
9. Opportunities for abatement of fugitive emissions (methane, nitrous oxide, and CFCs).
  - a) Replacement of inefficient equipment and upgrading of the infrastructure.
  
10. Encourage sustainable agricultural practices.
  - a) Prevention of and attention to forest fires.
  - b) Contribute to reduction of soil erosion in forest ecosystems, especially for conservation of carbon in the soil.
  - c) Conservation farming to maintain carbon reserves and increase capture reserves.

- d) Recovery of depleted lands.
  - e) Reduction of N<sub>2</sub>O emissions from fertilizers.
  - f) Promote the conversion of parcels that produce corn and other basic home-use crops to organic production systems.
  - g) Encourage sylvopastoral practices and other ecosystemic services.
  - h) Promote the use of alternative practices to the use of fire, such as "*roza, pica e incorpora*" [clear, plow, and incorporate], which tend to reduce the burning to clear farmland.
11. Reduce pressure on forest zones.
- a) Recovery or improvement of the plant cover through recovery of farm and/or grazing land.
  - b) Restoration of forest ecosystems.
  - c) Encourage the development of commercial forest plantations to reduce pressure on native forests and stimulate the national market for forest products.
  - d) Low-environmental impact productive activities that benefit local communities.
  - e) Generate understanding of the impact and vulnerability of forest production in view of weather variability and climate change.
  - f) Expand the forest area supported for conservation under the concept of payment for environmental services.
  - g) Promote the conservation of carbon in vegetation and soils of land ecosystems by encouraging the establishment of Wildlife Conservation Management Units.
12. Conservation, recovery, enrichment, and management of carbon deposits.
- a) Mitigate emissions from land use, land-use change, and forestry (LULUCF)
  - b) Sustainable forest management.
  - c) Increase in areas under various conservation schemes.
  - d) Reduction of emissions from deforestation and soil degradation.
  - e) Conversion of farmland to commercial forest plantations or reforestation.
  - f) Evaluate the impacts of carbon change on natural ecosystems and species.
  - g) Expand the forest area supported for conservation through the concept of payment for environmental services.
  - h) Actions for restoration, conservation, and protection of ecosystems vulnerable to climate change, especially coastal wetlands and transition zones between ecosystems.

## **D. INCENTIVE PROGRAM FOR SUSTAINABLE FOREST MANAGEMENT/REDD+**

### **D.1. Topics approved for the focal area: Incentive Program for Sustainable Forest Management/REDD+**

1. Reduce pressure on forest resources and generate a sustainable flow of forest ecosystem services.
2. Strengthen the environment for reducing GEG emissions from deforestation and forest degradation and increase the carbon stocks from LULUCF activities (land-use, land-use change, and forestry)

### **D.2. Sub-topics of each topic for selection of projects in the focal area on Incentive Program for Sustainable Forest Management/REDD+**

1. Reduce pressure on forest resources and generate a sustainable flow of forest ecosystem services.
  - a) Upgrading of forest policy and legal and related legal and regulatory frameworks.
  - b) Improvement of actions for application of the law and governance.
  - c) Improvement of decision-making processes (for example, the potential for reforestation, analysis of the potential/feasibility and planning of related activities, analysis of trade-offs in the medium and long term.
  - d) Sustainable technologies for harvesting timber and other products, and forest management planning.
  - e) Certification of forests and verification of the wood supply chains.
  - f) Integrated management of forest fires.
  - g) Methods for settling conflicts (concerning ownership and/or disputes on the use of forests or fair sharing of benefits).
  - h) Building of capacities with sustainable financing mechanisms, such as pilot/model projects of payment for environmental services and other market mechanisms, using economic assessment tools and methodologies.
  - i) Industrial, agricultural, and domestic technologies for reducing pressure on forests (energy efficiency, fuel substitution, etc.).
  - j) Increased ecological connectivity and improved values of forest biodiversity at the landscape level, including farming activities (such as the management of buffer zones, corridors between protected areas, and the inclusion of forest biodiversity conservation aspects in forests destined for productive uses).
  - k) Promotion of best practices in forest management by communities and small landowners of forestland.
  - l) Pilot programs for adaptation of forest ecosystems to climate change.
  - m) Conservation and recovery of vulnerable or priority ecosystems such as wetlands, mangrove swamps, mountain cloud forests, and others.
2. Strengthen the environment for reducing GEG emissions from deforestation and forest degradation and increase the carbon stocks from LULUCF activities (land-use, land-use change, and forestry).

- a) Early REDD activities (alignment of public policies, testing of local governance schemes, including the creation of strategic partnerships between agencies at the three levels of government, civil society organizations, and the private sector).
- b) Competence study on land use and land-use change caused by production of food or bioenergy crops (for example, analysis of the potential/feasibility and planning of related activities, analysis of trade-offs in the medium and long term).
- c) Building of technical and institutional capacity to monitor and reduce GEG emissions caused by deforestation and forest degradation (including estimation and monitoring of associated emissions and changes in the carbon stocks, national forest inventory, improved access to national information for monitoring and modeling the forest production potential and trends in the carbon stocks).
- d) Testing and adoption of schemes that permit income generation in the carbon market.