Report No. PID8096

Project Name	Mexico-Natural Disaster Management (@)... Project
Region	Latin America and Caribbean Region
Sector	Other Environment
Project ID	MXPE64887
Borrower(s)	BANOBRAS
Implementing Agency	Address MINISTRY OF FINANCE Secretaria de Hacienda y Credito Publico (SHCP) Subsecretaria de Egresos Constituyentes No. 1001 Edificio C-3, Sexto Nivel Col. Belén de Las Flores Contact Person: Lic. Antonio Alvarado Ramirez, Jefe de La Unidad Tel: 228-49-15 Fax: 228-49-62 Email: jalvarad@sse.gob.mx
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1. Country and Sector Background

In terms of geography and climate, Mexico is one of the most diverse countries in the world. It is susceptible to a wide range of natural disasters such as floods, droughts, volcanic eruptions, earthquakes, fires and tropical cyclones. These natural events can cause widespread loss of life and damage to economic infrastructure because of the country's settlement patterns, construction practices and a lack of disaster response capacity.Since 1980 direct damage from natural disasters in Mexico totaled some US$11.1 billion, and some 8,000 people have lost their lives. Apart from the direct losses, disasters disrupt the development process because the need for emergency and reconstruction financing diverts budgetary resources from their originally intended uses, disrupting priority investment programs. For example, in recent years, an estimated 30 percent of government funding for World Bank infrastructure projects in Mexico was diverted to respond to emergencies.Moreover, in Mexico as in other developing countries, the poor are disproportionately affected by natural disasters. According to assessments of the National Center for Disaster Prevention (CENAPRED), 68 percent of people affected by natural disasters in Mexico are poor and extremely poor. Many lower income people live in substandard housing that is less able to withstand natural forces than housing of the better off. Some live in high density settlements near cities, built on steep slopes vulnerable to landslides. Others live in low lying areas and are at risk of flooding. The poor also have less access to resources to help them recover from physical losses

than others, and therefore can suffer permanent setbacks from natural disasters. They are less likely to have savings, insurance or access to credit which could help them finance reconstruction costs. They are also more likely to lose their source of livelihood because they earn their living from small agricultural plots which are themselves damaged by the natural disasters. During crises poor children are also more likely to suffer malnutrition and health problems, and frequently drop out of school. These can lead to chronic poverty. The Mexican government is well aware of the country's vulnerability to risks from natural hazards, and has taken important steps to reduce their impacts on lives and property. These include: The development of disaster preparedness and civil defense programs led by the Secretariat of Government (SEGOB) and the Secretariat of Environment, Natural Resources and Fisheries (SEMARNAP), and implemented through the Civil Defense System (SINAPROC)The establishment in 1996 of the Fund for Natural Disasters (FONDEN) at the federal level, as a last resort source of financing for reconstruction of public infrastructure, restoration of protected areas, purchase of emergency response equipment, and disaster relief. The establishment of CENAPRED as a center for research and diffusion of mitigation technologies; andThe provision of support for university-based research on risk assessment and modeling (for example, at the National Autonomous University of Mexico (UNAM))Federal agencies, (including SEGOB, Secretariat of Communications and Transportation (SCT), Secretariat of Agriculture, Livestock and Rural Development (SAGAR), Secretariat for Social Development (SEDESOL), SEMARNAP, Secretariat of Public Education (SEP), Secretariat of Health (SSA), and the National Water Commission (CNA)) and state or municipal governments execute the emergency activities and reconstruction works. Ongoing disaster management activities have helped establish an important knowledge and institutional base for disaster preparedness, mitigation and reconstruction, especially for seismic and hydrometeorological events affecting major cities. However, this knowledge and institutional base needs to be expanded to cover other hazards (such as forest fires) and vulnerable regions of the country. Financing of reconstruction following natural disasters also needs to be more efficient and effective, for example through better use of risk transfer instruments by both the private and public sectors. Moreover, while government agencies do include actions to prevent damage from natural forces, these need to be made more systematic.Following experience with the first two years of FONDEN's operations, the Mexican government reviewed FONDEN's operational practices, with a view to making them more effective. As part of these efforts, in mid-1998 the government requested Bank assistance to improve its management of natural disasters. In response, the Bank undertook a study examining how the government was managing natural disasters, both in terms of preparedness and mitigation, as well as risk financing and transfer. This study was discussed in a February 1999 workshop attended by stakeholders from government, academia and the private sector. The study found that:In Mexico, only about 10 percent of private property was insured. Moreover, there was need to develop better mechanisms (for example, insurance pools) to make non-earthquake catastrophic insurance more widely available. It is likely that privately-purchased catastrophic risk coverage will increase only slowly, in concert with the growth of per capita income and a "culture of safety" in the society, and the introduction of new insurance products. Thus, government will continue to bear a large share of risks from natural hazards in the near and medium-terms. Insurance companies could provide

incentives for insured parties to adopt measures to reduce losses through their underwriting and monitoring practices. Accordingly, adoption of a policy requiring government entities to insure public properties could be a powerful means for encouraging adoption of prevention measures, thereby reducing public sector losses in the event of natural disasters. As a result of the review of FONDEN's operations, the Government decided to take several steps to improve FONDEN's operating policies and practices to clarify its responsibilities, improve its decision processes and make them more transparent, define the risks assumed by FONDEN, and find ways to help it meet disasters whose costs exceed FONDEN's resources. Following consultations with a broad range of stakeholders and the Bank, in March 1999 the government modified FONDEN's operating guidelines to (a) make FONDEN's decision rules for access to resources and the loss assessment process clearer and more transparent; (b) limit the moral hazard faced by FONDEN, by encouraging greater use of private insurance by FONDEN's beneficiaries, and establishing clear cost-sharing formulas for FONDEN's financing of disaster losses falling under the responsibility of state and municipal governments; and (c) encourage adoption of prevention measures, both within the reconstruction programs financed by FONDEN and in the regular investment programs of FONDEN's beneficiaries. These policies and practices are being formalized through voluntary agreements between the federal and state governments (and the Federal District), setting out the rights and responsibilities of the parties, including their acceptance of FONDEN's rules. Each agreement will lead to the establishment of a trust (fideicomiso mixto estatal or FME) between the federal government and the respective state (or the Federal District) within which the agreed shares of financing to be paid by the various parties will be blended to achieve the agreed cost-sharing targets for disaster relief and reconstruction activities. Under the terms of each trust, which are administered by BANOBRAS as trustee, spending decisions and the contracting of eligible emergency activities will be made by a technical committee comprising state and municipal representatives, acting with advice from federal entities. These measures are expected to increase transparency, accountability and efficiency in the use of FONDEN's resources, and redistribute the costs of natural disasters between the various levels of government and the private sector, and over time reduce the share of such costs borne by the public sector.By the end of January 2000, 27 states (of 32 states plus the Federal District) had signed trust agreements with FONDEN. In addition, SEGOB and FONDEN were providing intensive training to state and municipal officials on FONDEN's objectives and procedures. Both SEGOB and FONDEN have learned important lessons during the first year applying the 1999 guidelines, including lessons from the operations of different technical committees. These lessons include the importance of providing financing for early warning systems and reconstruction of damaged national cultural property, the need to further decentralize decision-making authority, the need to apply good resettlement practices, and the need to develop uniform standards for insuring public property. Revised FONDEN guidelines were issued in February 2000 reflecting the emerging lessons. The government is continuing to explore best use of FONDEN resources and is seeking Bank participation in the learning process. Areas of particular interest are whether and how how to employ reinsurance and capital market instruments to finance FONDEN expenditures more efficiently, and analytical methods to set priorities for public investment in prevention activities. It is therefore likely that during the project period the Government will continue to seek ways to improve

the policy and institutional framework for disaster management in Mexico.

2. Objectives

The project will help reduce human, economic and financial costs of natural disasters in Mexico by (a) providing resources for rapid recovery following natural disasters within a framework of sound budget management; and (b) reducing the likelihood that natural forces will result in loss of life and infrastructure damage by supporting policy and instituional reforms aimed at reducing vulnerability and risk and improving government capacity for analyzing natural disaster risk.

3. Rationale for Bank's Involvement

In Mexico Bank resources accrue to the Treasury and government agencies have access only to resources distributed to them through the annual public budget. Currently, federal agencies that agree to implement Bank-supported projects may have to undertake them with no additional budgets. Under these conditions knowledge transfer is a major contribution of the Bank. Thus, it makes sense for the Bank to concentrate its efforts in areas where the Borrower can benefit from Bank knowledge and expertise. One such area is natural disaster management. In 1998 the Bank established the Disaster Management Facility (DMF) to ensure that its knowledge, expertise and ability to attract world class partners is used to assist developing countries--where 95 percent of deaths from natural disasters occur. The DMF and collaborating Bank Group units are well equipped to help Mexico find ways to increase protection, reduce environmental degradation contributing to disasters, identify and implement prevention measures, and devise ways to share natural disaster risks with the private sector. The DMF's expertise has already been drawn upon for the design of the project. During project implementation the Bank will be able to provide Mexican counterparts with expert advice through the DMF and the newly-established ProVention Consortium, comprising government and business leaders, international agencies, non-governmental organizations, academic institutions, and others. Recognizing the Bank's capacity to mobilize expertise in natural disaster management, the government requested assistance in refining FONDEN operations. It also requested help in developing methodologies for defining prevention programs and assistance in understanding its options to use risk transfer instruments more widely.A Japanese PHRD grant has financed studies and technical assistance to begin developing the framework for identifying priority prevention programs, so that investments generate the greatest return for the resources spent. The grant is also supporting research on options for financing post-disaster reconstruction costs including FONDEN's role as part of the financing system, work to develop risk maps for forest fires, a review of the municipal operations of the National System for Civil Protection (SINAPROC), and development of a methodology for hazard mapping at the municipal level to support preparation of prevention programs. It is expected that further studies will be carried out through the prevention and capacity building components of the project, and that in the medium term these will lead to formulation of public investment programs for prevention works.

4. Description

The project will finance subprojects acceptable to the Bank. It is expected to be committed in three calendar years (years 2001-03) and

disbursed in about four years. It will support three components: (1) investments in prevention studies, (2) investments in post-disaster emergency recovery and reconstruction activities, and (3) capacity building activities. Component 1: Prevention studiesThis component will finance analytical, design and policy-related studies aimed at reducing economic and human losses in the event of a natural disaster. Prevention activities will be executed through federal agencies as part of their annual investment programs. Participating federal agencies will be SHCP, SEGOB/CENAPRED, SEMARNAP/CNA, SCT, SAGAR, SEDESOL, SEP and SSA. At the start of each (Mexican) fiscal year SHCP will agree with the Bank and the executing agencies upon the prevention studies that the project will finance. Such studies will be selected and implemented in accordance with the Bank's procurement guidelines and procedures, and technical criteria acceptable to the Bank. These criteria will be included in the project's operating manual. Component 2: Emergency recovery and emergency reconstruction investmentsThis component will support emergency recovery and reconstruction activities financed through FONDEN and executed either through federal agencies or state and municipal agencies financed through fideicomisos mixtos estatales (FMEs). Only FONDEN-financed activities initiated within 15 days before and 180 days following the declaration of an emergency by SEGOB will be eligible for Bank financing. Emergency recovery activities are defined for purposes of the project as those activities initiated within 15 days before and 45 days after the declaration of an emergency by SEGOB. These activities are subject to expedited procurement procedures. Reconstruction activities are defined for purposes of the project as those initiated between 45 days and 180 days following the declaration of an emergency. Reconstruction investments will be selected and implemented in accordance with the Bank's procurement guidelines and procedures, and environmental, social and technical criteria acceptable to the Bank. Eligible emergency recovery and reconstruction expenditures include net-of-tax FONDEN expenditures for activities that satisfy the environmental criteria included in Annex 11, except for cash compensation paid to producers, purchases of equipment for disaster preparedness, relief assistance, land, and activities not constituting investments. Component 3: Capacity building activitiesThis component will finance activities to strengthen capacity of SHCP, SEGOB/CENAPRED, SEMARNAP/CNA, SCT, SAGAR, SEDESOL, SEP and SSA to respond to natural disasters, manage social, cultural and environmental issues arising from natural disasters, and use insurance and other risk transfer instruments. It is envisaged that this component will help develop a framework to help sectoral implementing agencies identify priority prevention investments for inclusion in their annual programs. At the start of each (Mexican) fiscal year SHCP will agree with the Bank and the executing agencies upon capacity building activities that the project will finance. Such investments will be selected and implemented in accordance with the Bank's procurement guidelines and procedures and technical criteria acceptable to the Bank. These criteria will be included in the project's operating manual.

5. Financing

	Total (US$m)
GOVERNMENT	254.30
IBRD	404.05
IDA	
Total Project Cost	658.35

6. Implementation

Project implementation period. The project will be implemented over four calendar years, 2001-2004. It is expected that the loan will be fully committed in three years and will be fully disbursed by December 31, 2004. Project coordination and oversight. SHCP will establish a project coordinating committee (PCC), and assume the role of overall project coordination. This PCC will comprise representatives from SHCP, SEGOB/CENAPRED, and BANOBRAS. SHCP will chair the PCC. Representatives from the FMEs and other implementing agencies will be invited when warranted. The PCC will monitor progress of project implementation based on technical and financial information received from BANOBRAS and the implementing and auditing agencies. A staff member of SHCP has been designated to be project coordinator. He will serve as the principal point of contact with the Bank and will provide progress reports to the government and the Bank through BANOBRAS.Executing agencies. SHCP, SEGOB/CENAPRED, SEMARNAP/CNA, SCT, SAGAR, SEDESOL, SEP and SSA will execute prevention and capacity-building activities as part of their normal work programs. These same federal agencies and those state and municipal agencies which are FONDEN's beneficiaries (financed through FMEs) will execute emergency recovery and reconstruction activities. The FMEs and the federal implementing agencies will provide technical and monitoring data to the project coordinator through BANOBRAS. Project administration. BANOBRAS as the government's financial agent (and building on its responsibilities as trustee for the FMEs) will exercise key administrative and quality control functions. It will oversee financial management, procurement, disbursement and audit arrangements for the project, and inform federal and state environmental authorities of FONDEN-financed activities. BANOBRAS will collect technical and financial data from the FMEs and the federal implementing agencies, and provide them to the project coordinator. BANOBRAS will screen expenditures which are not subject to Bank prior review (such as those for emergency recovery activities) ex-post for eligibility for Bank financing. Procurement arrangements. Based on experience with procuring contracts under emergency conditions in Mexico, and the fact that monitoring of contracts not requiring prior review by the Bank will be done through sampling, there is a risk that contracts not satisfying the definition of emergency activities as defined above will be included in the emergency component and procured through direct contracting. This may be especially true in the case of contracts financed through the FMEs, which may be procured through state and local agencies with little familiarity with Bank procurement requirements. The procurement risk for this project is therefore rated as high. In order to mitigate this procurement risk, the following arrangements have been agreed with the Borrower: (a) Procurement of goods, works and services would be carried out by the federal agencies with experience in procurement under Bank financed projects, namely SHCP, CNA, SSA, SEP, SCT, SEMARNAP, SAGAR, SEGOB (through CENAPRED), and SEDESOL). In the case of those FONDEN-financed expenditures that are contracted by nonfederal agencies through the FMEs, the federal agencies previously cited will be responsible for carrying out the procurement process, even though other agencies sign the final contracts; (b) BANOBRAS will ensure quality control of all procurement processes, liaise with the Bank and the executing agencies, organize and maintain procurement records, draft quarterly reports, and be responsible for project accounting, financial reporting, and compliance with audit and environmental requirements agreed under the project. BANOBRAS will also

review and issue no objections for all procurement contracts not subject to Bank prior review before signature by the contracting agency. The Loan Agreement will assign these responsibilities to BANOBRAS, which will retain adequate staff for this purpose; (c) A justification for the use of direct contracting in emergency activities will be required and will be maintained on file. Such justification will clearly establish a causal relationship between the specific emergency and the need for the direct contract Every quarter a copy of the justifications will be sent to the Bank by BANOBRAS. The project will include annual procurement audits of selected contracts, particularly those awarded on a sole source basis as a result of any specific emergency; and (d) During the first year of the project, BANOBRAS will implement a training program through which at least two staff members from each of its state delegations will receive training in Bank procurement procedures.Accounting, financial reporting and auditing arrangements. Disaster recovery and reconstruction projects cofinanced with resources from FONDEN, states, and municipalities are financed through FMEs established in each of the affected states. The FMEs will maintain separate accounts for each disaster and will prepare statements of their respective sources and uses of funds (disaggregated by budget category) and balance sheets showing their financial condition. BANOBRAS, as their trustee, will maintain budget and financial accounts for each of these FMEs, which will be subject to annual audits acceptable to the Bank. For disaster reconstruction of purely federal assets, and prevention and capacity building activities implemented by federal agencies, the respective federal agencies will maintain budget accounts and supporting documentation in accordance with federal budget and accounting procedures. BANOBRAS, in its role as financial agent and trustee for the FMEs, will establish a consolidated project account which reflects budget allocations and expenditures for all project activities, and will arrange to receive copies of documents (for procurement review, preparation of SOEs, and the like) to support disbursement requests to the Bank. The project accounts maintained by BANOBRAS will also be subject to annual audits acceptable to the Bank. For purposes of carrying out the project, a Special Account will be opened and maintained by BANOBRAS on terms and conditions satisfactory to the Bank. Deposits into the Special Account and corresponding replenishments, up to the authorized allocations set out in the Disbursement Letter, will be based initially on Withdrawal Applications accompanied by supporting documentation as specified in the Disbursement Handbook (traditional procedure based on SOEs). A financial management assessment was carried out during project preparation. The classification of the project for FMI purposes is based upon the judgment that while the project's financial management system is basically sound, reporting systems cannot immediately generate PMRs. Accordingly, a time-bound action plan for improving reporting systems has been agreed with the Borrower. By October 31, 2001 the Borrower and the Guarantor will complete the action plan aimed at preparing quarterly PMRs. The possible migration to PMR-based disbursements will be analyzed by the Bank, the Borrower, and the Guarantor during the second year of project implementation. Once the accounting and financial management systems of the federal executing agencies and BANOBRAS as trustee are deemed compliant with the Bank's Financial Management Initiative (FMI) requirements, and are certified as such by the Bank, migration to a project management report-based (PMR) disbursement system may be implemented.Accounting systems in the implementing agencies will operate in accordance with the "Financial, Accounting, Reporting, and Auditing

Handbook," dated January 1995 and published by the World Bank. The annual audit of the project will be carried out in line with both (a) the "Guidelines and Terms of Reference for Audits of Projects with financing by the World Bank in the Latin America and Caribbean Region" dated May 1999, and (b) the Technical Memorandum of Understanding agreed between the Bank and SECODAM in 2000. Terms of reference for annual audits of project accounts and specific arrangements related to auditors have been agreed. Audits will be carried out by independent auditors acceptable to the Bank, in accordance with international audit standards. The report of such auditors will be submitted to the Bank no later than six months after the end of the Borrower's fiscal year. Reporting. Different entities are responsible for reporting on various aspects of the project. All reports will be submitted to the Bank through BANOBRAS.The PCC will prepare progress reports every six months. No later than six months after the project closing date, the Guarantor will prepare and provide to the Bank a report on the execution of the project, its costs, and current and future benefits to be derived from it.SEMARNAP (with input from INE and PROFEPA) will produce an annual report on the environmental aspects of the project.SEDESOL will report on resettlement every six monthsthe Guarantor and BANOBRAS will provide quarterly project management reports acceptable to the Bank, in agreement with the financial management action plan.Project operating manual. The project operating manual will contain technical and legal documents pertaining to the project, management and implementation arrangements, FONDEN's guidelines, criteria for selecting prevention and capacity building activities, disbursement and procurement procedures and samples of standard procurement documents, audit requirements and terms of reference for external auditors, the environmental management plan and resettlement framework, monitoring indicators and reporting requirements.Supervision. The Bank will devote an estimated 100 staff weeks to supervise progress under the Bank loan through fiscal 2005. Two routine supervision missions will be planned each year, in the spring and fall. Each mission will focus on (a) FONDEN performance; (b) progress with prevention and capacity building activities; (c) procurement and financial management issues; and (d) environmental and social impacts of subprojects, on an individual and a cumulative basis, the extent to which various emergencies were precipitated or exacerbated by inappropriate environmental practices, and the adequacy of safeguard procedures agreed for the project. Mission members will be drawn from Mexican or Washington-based Bank staff or consultants with appropriate skills. Since the Mexico field office has procurement and financial management specialists on its staff, these issues will be dealt with on an ongoing basis, leaving only special issues to be addressed during supervision missions.Climatological disasters normally occur seasonally, with floods and hurricanes occurring during July-December, and droughts and forest fires occurring during January-June. Therefore, the skill mix of environmental field staff will vary depending on the season. The fall supervision mission will focus on response to fires and droughts, and general institutional performance in applying this EMP under the project. The spring mission will focus on response to floods and hurricanes, and budgetary issues for the forthcoming Mexican fiscal year. Effects of episodic geological events (major earthquake or volcanic eruption) will be reviewed in the field as needed. The midterm review will include (a) an analysis of the progress made towards achieving the project's objectives and the degree to which they remain valid; (b) an assessment of the adequacy of treatment of

environmental, cultural, and social issues under the project, including those arising from resettlement; (c) identification of any changes which should be introduced into the project's EMP or resettlement framework in order to better mitigate emergencies arising from inappropriate environmental practices and apply the Bank's safeguard policies during project execution; (d) consideration of ways to modify the EMP's triggers for prior review by the Bank to reflect the magnitude of the anticipated environmental and social impacts from the proposed interventions, and not size alone, and (f) the adequacy of the eligibility period used to define expenditures to be included under the project. The implementation completion report mission will evaluate the overall success of the project relative to its objectives, the effectiveness of executing agencies in addressing environmental and social issues, and draw lessons for improvements in design and implementation of similar projects. The implementation completion report will include an analysis of the adequacy of the instruments used to apply Bank safeguard policies during project execution.Monitoring. Overall project monitoring will be based on indicators that the Bank and its Borrowing country counterparts have together selected to enable FONDEN and other participating agencies to measure the success of their programs, including the activities supported by the project. The indicators will be included in the project's operating manual.

7. Sustainability

The sustainability of project benefits will depend on government establishing an ongoing process of identifying and implementing annual prevention investments, providing incentives to public entities to insure properties against natural disaster risks and setting up a system of post-disaster financing which is efficient and effective.

8. Lessons learned from past operations in the country/sector

Previous Bankwide experience with disaster reconstruction projects shows that for authorities to act quickly, flexible procurement procedures must be in place, and implementing agencies should have a clear definition of their roles and responsibilities. It also shows that victims of disasters must be involved in decisions which affect them, such as where to locate new housing and community infrastructure. Otherwise affected people may not use the new facilities, and the resources used to build them will be wasted.Another important lesson emerging from disaster management projects is that prevention is key to reducing losses from disasters. There are many policy, institutional and physical measures that governments can adopt to improve land-use planning; encourage better engineering, construction, and maintenance practices; and reduce environmental degradation that contributes to natural disaster losses. Further, government can take steps to encourage the development of insurance markets and create incentives for public sector entities to insure their properties against loss--thereby reducing the fiscal shocks to the economy from natural disasters and speeding reconstruction by making it easier to mobilize resources to finance its costs. Finally, experience from some countries shows that construction costs can fall when the post-disaster procurement process requires more competitive procedures.The proposed project design reflects these lessons. FONDEN's present operating guidelines have been developed following widespread consultation with diverse stakeholders and the Bank. These rules now provide for speedy access to financial resources for emergency recovery and reconstruction,

and specify clearly the roles of states, municipalities, federal agencies and others in responding to natural disasters. FONDEN's rules, which provide for cost-sharing among different levels of government, also encourage public entities to insure their properties against natural disaster risk. Indeed during 1999, following a catastrophic earthquake and floods, the state of Puebla placed insurance to limit its future financial exposure to natural disaster losses. Through SEDESOL, mechanisms are in place to ensure that disaster-affected people are involved in decisions about how to best rebuild their lives.Moreover, the project will provide support to develop an analytical framework for assessing and reducing disaster risk in development projects and reconstruction investments. And it will support analytical studies and technical assistance to underpin development of Mexico's first explicit program of prevention activities.

9. Program of Targeted Intervention (PTI) N

10. Environment Aspects (including any public consultation)

Issues : For purposes of environmental assessment (EA) the project is classified as category B because no subprojects are expected to have significant adverse environmental impacts. The vast majority of works subprojects will involve repair or reconstruction of infrastructure works at their original sites. Subprojects may occasionally involve capacity expansion (for example, water treatment), relocation of infrastructure (either to improve its resilience or to provide community services such as houses, schools and clinics), or work in protected areas (mainly to restore ecosystems damaged in natural disasters). Both a negative and positive list of eligible subprojects has been developed to provide clear guidance on eligible activities and exclude activities with potentially significant environment impacts (Bank environmental category A) from Bank financing. In addition, all nonemergency subprojects will be EA category C. Mexican Environmental Law and regulations. Mexican Environmental Law (Ley General del Equilibrio Ecológico y la Protección al Ambiente or LGEEPA) was enacted in 1988 and last modified in 1996. It requires an executing agency or responsible party (federal entity, state or municipal government, or contractor) to obtain an environmental permit. This permit may require the responsible party to submit an environmental impact assessment report to the National Ecology Institute (INE) for works and activities that fall under federal jurisdiction and that may have negative environmental impacts. The law provides for environmental assessment procedures which vary by type of works and their environmental impacts. A "manifestación de impacto ambiental" (MIA) is required for activities with the most significant environmental impacts. An "informe preventivo" is required for activities carried out within urban development or ecological zoning plans, or as part of an approved development program, and for activities located in approved industrial parks, or for which environmental standards exist. The federal environmental law sets minimum standards that state or municipal governments must adhere to. Moreover, when regulated activities do not fall explicitly under federal jurisdiction, SEMARNAP may issue a recommendation for environmental management to the relevant state or municipal authority. Thus, all levels of government must apply minimum standards of environmental management. In emergencies, when response speed is critical, Mexican law permits executing agencies to initiate works without prior consultation with environmental authorities. However,

within three days of initiating works, executing agencies must inform SEMARNAP that works have started, and within twenty days of initiating works they must provide SEMARNAP with a report on the types of works and associated mitigation and compensation measures that will be undertaken. Mexico issued new environmental regulations in May 2000 reflecting experiences gained through environmental impact assessments. These regulations give greater emphasis to sound natural resource management; refine the scope and content of EA procedures and reports; provide more mechanisms for public consultation, citizen participation and complaint; and include specific guidance on environmental permitting requirements in emergency situations. Eleven sectoral guidelines for environmental assessment are expected to be enacted soon, and should help improve the quality of environmental impact assessments.Environmental management capacity of implementing agencies. A capacity assessment of the federal implementing agencies participating in the project found that their capacity to manage environmental issues in their investment programs is adequate. Public consultation. The environmental law provides for public participation in the EA process. The new regulations for environmental assessment emphasize the law's provisions related to public participation and the right to information. They require that a list of all permit requests be published and that INE's analysis of MIAs be made publicly available. The law also gives rights to any member of the public to request public consultations on projects submitted to SEMARNAP via MIAs. However, public consultation is at INE's discretion, and therefore not mandatory for all investments.Cultural property. Mexico has a rich cultural heritage and archeological, artistic and historic sites are distributed widely throughout the country. Therefore, natural disasters and subsequent reconstruction work may uncover cultural property, requiring the use of "chance find" procedures to ensure that that qualified personnel make decisions on management of the sites and materials. Natural disasters may also damage cultural property (separate earthquakes striking Oaxaca and Puebla in 1999 damaged important archeological sites and colonial buildings), which requires properly planned and supervised stabilization or restoration measures. Cultural property is highly valued in Mexico, and protected by national law, institutions and practices. The federal law on archeological, artistic and historic monuments and sites defines archeological, artistic and historic property and specifies the authority and responsibilities of cultural heritage agencies when sites or materials of cultural significance are discovered. The law grants responsibility to the National Institute of Anthropology and History (INAH) for archeological and historic property, and to the National Council of Fine Arts and Culture and the National Institute of Fine Arts and Literature for artistic property. The law requires any party finding cultural property to report the discovery to a local civil authority, which must report the find to INAH within twenty four hours. The law further establishes INAH as the sole entity authorized to excavate and research discoveries of cultural property, and empowers INAH to suspend any works or activities carried out by unauthorized persons. To ensure adequate resources are available to repair cultural property and sites damaged during natural disasters, FONDEN has recently incorporated into its rules provisions for financing costs of rehabilitating national heritage buildings and sites. Mexico's legal and regulatory framework is therefore consistent with the Bank's guidance on cultural heritage. Through application of the environmental management plan (EMP) for the project, the project will

encourage integration of cultural and environmental protection in the reconstruction process. Summary capacity assessment. Mexican laws and regulations dealing with environmental assessment and management of "chance find" cultural property are broadly consistent with Bank environmental and cultural property safeguards as defined in the Bank's operational policies on environmental assessments (OP 4.01) and natural habitats (OP 4.04), and its guidance on treatment of cultural property. SEMARNAP (including INE and PROFEPA) has adequate capacity to ensure that executing agencies comply with Mexico's federal environmental laws and regulations, which establish minimum standards for other jurisdictions. SEMARNAP has many years of experience and a large professional staff working in diverse aspects of environmental management. Reinforcing this view, an ongoing Bank OED study finds that SEMARNAP's environmental review and enforcement process is generally operating satisfactorily (its agencies have benefited from considerable Bank technical assistance through the Mexico Environmental Management Project, Northern Border Environment Project, and Water Resources Management Project). The study points out that the Bank's annual reviews of Mexican environmental assessment have found a steady increase in their quality and effectiveness. Moreover, principal federal implementing agencies have adequate capacity to manage environmental issues faced in the emergency investments for which they are responsible. Therefore, the project can rely on Mexico's established procedures as the basis for environmental assessment for most emergency recovery and reconstruction works. Environmental screening and review procedures. Activities financed by Bank loans are typically subject to ex ante environmental screening, assessment and public consultation requirements pursuant to the Bank's OP 4.01. However, in the case of emergency recovery loans, OP 4.01, para. 13 states that "when compliance with any requirement of this policy would prevent the effective and timely achievement of the objectives of an emergency recovery project, the Bank may exempt the project from such a requirement."Emergency recovery loans are governed by the Bank's OP 8.50 and are made in response to an emergency which has already occurred. The loan for this project is not made in response to an emergency which has occurred prior to the processing of the project, and in this sense does not fit exactly within the bounds of OP 8.50. Nevertheless, the emergency subprojects envisioned under the project will be made in response to emergencies occurring before such subprojects are prepared, and thus will be subject to the same urgent response imperative -- to protect affected lives and property -- as may justify exemptions (pursuant to OP 4.01, para. 13) from potentially time-consuming environmental requirements.The only difference between a classic OP 8.50 emergency recovery project and the emergency subprojects envisioned here is that the Bank cannot today, when the loan is being processed for approval, judge on the ground, in the face of an actual emergency, the extent to which OP 4.01 environmental requirement exemptions may be justified. Potentially, the Bank could perform such an ex ante analysis for every emergency subproject that arises post-loan approval by the Bank's Board, but this would imply Bank prior review of each case, with the delays, impracticalities and Bank micro-scrutiny such prior review can signify (all in the face, again, of an emergency requiring the quickest response). Given that the project contemplates responses to potentially hundreds of "routine" natural disasters expected to occur throughout all of Mexico's varied and extensive geography, such Bank micro-scrutiny could jeopardize the needed speed of response implicit in any emergency, and hamper Mexico's

sophisticated processes for dealing swiftly with such cases through FONDEN.Hence, the project, through a proposed application of OP 4.01 exemption policy as allowed in emergency settings, provides for reliance on notification (by subproject implementing agencies to Mexican federal environmental authorities deemed competent as indicated in the project's Environmental Management Plan) of the emergency subproject activities falling under federal jurisdiction, after those activities have been initiated. Nothing prevents such notification from being made prior to such initiation, triggering full ex ante environmental assessment under Mexican law if the local parties involved feel that the circumstances so allow, despite the emergency nature of the situation. However, by applying the cited OP 4.01 exemption possibility, any such ex ante environmental review, by the Bank or local environmental authorities, as well as any ex ante public consultation on potential environmental impacts and mitigation, would not be mandatory.There may therefore be some risk that, in any given future subproject, an unwanted environmental impact may occur because of said exemptions necessitated by the emergency nature of the response. Consequently, the project legal documents specify a series of protective measures designed to minimize this risk. Such measures include the following:(a) Specification of a "positive list" of activities that may be carried out under subprojects;(b) Specification of a "negative list" of activities that may not be carried out under subprojects (such activities include what would typically be considered risky "category A" activities for environmental purposes under Bank policy);(c) Mandatory ex ante Bank prior review of subprojects considered potentially risky because they affect some protected areas, or are particularly large, involve relocation of infrastructure, or involve expansion of infrastructure (see the project's Environmental Management Plan for details); and(d) Limitation of subprojects to those that involve initiation of on-site work within no later than 180 days after the official declaration of a disaster, the assumption being that work initiated afterwards is indicative of the lack of a true emergency. The 180 day cut-off was established in consultation with Bank environmental staff, and reflects their opinion that a sound ex ante environmental assessment of a subproject -- together with meaningful public consultation -- would take at least 180 days to perform. Consequently, a subproject begun more than 180 days after a disaster declaration could have benefited from such an assessment and consultation and would thus not require the exemptions proposed under OP 4.01, para. 13.Procedures and schedules for Bank review. As part of its routine supervision process and midterm review, the Bank will review performance of INE and PROFEPA in applying the environmental assessment procedures, evaluate performance of executing agencies in addressing environmental issues in design and implementation of subprojects, and agree on actions to be taken to improve performance. This will involve visits by specialists to selected sites of subprojects for first-hand assessment of implementing agencies' performance. They will assess the environmental and social impacts of subprojects, both individually and cumulatively, and the adequacy of safeguard procedures agreed for the project. They will also evaluate the extent to which the emergency was precipitated or exacerbated by inappropriate environmental practices and propose remediation measures to be included in the project. The midterm review will consider especially (a) any changes which should be introduced into the project's EMP or resettlement framework to better mitigate emergencies arising from inappropriate environmental practices and apply the Bank's safeguard policies during project execution, and (b)

ways to modify the EMP's prior review triggers to reflect the magnitude of the anticipated environmental and social impacts from the proposed interventions, rather than reflect size alone. The implementation completion report will, among other aspects, evaluate the effectiveness of executing agencies in addressing environmental and social issues, and draw lessons for improvements in design and implementation of similar projects. It will also include an analysis of the adequacy of the instruments used to apply Bank safeguard policies during project execution. Subprojects implemented in violation of Mexico's laws for environment, EA procedures, or treatment of cultural property will not be eligible for Bank financing.

11. Contact Point:

Task Manager
Christopher J. Barham
The World Bank
1818 H Street, NW
Washington D.C. 20433
Telephone: 202-473-8615
Fax: 202-522-3540

12. For information on other project related documents contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-5454
Fax: (202) 522-1500
Web: http:// www.worldbank.org/infoshop

Note: This is information on an evolving project. Certain components may not be necessarily included in the final project.

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