

Sound Practice No. 1

Coordinating Risk Mitigation Efforts: National Civil Protection System (SINAPROC)



The definition and implementation of the national disaster prevention policies in Mexico started some months after the earthquake of 1985. For this reason, the Mexican government established the National Civil Protection System (SINAPROC) in 1986 in order to coordinate efforts for disaster recovery.

The SINAPROC is an organic and articulated group of structures, functional relationships, methods, and procedures that determine the dependences among the public, social, and private sectors with the federal, state, and municipal authorities in order to define and implement agreed actions for population's protection against the dangers and risks that society faced.

This organization is responsible for mitigating the negative effects of disasters and reducing the human lives and material losses caused by them.



The SINAPROC is constituted by three sectors:

1. Public Sector

It is integrated by the dependencies and entities in charge of the public administration, the coordination organization among the federal, state, and municipal levels.

2. Social Sector

It is constituted by the academy, volunteers, and non-governmental organizations.

3. Private Sector

It is conformed of enterprises and the financial sector.

One of main challenges of the SINAPROC is to coordinate the large number of organizations and institutions responsible for the disaster prevention policy. This is due to the fact that the process of decision making is centralized. Therefore all these organizations and institutions are just in charge of implementing the decisions made

without being considered in the process. This situation limited the success of the disaster prevention policies because they do not incorporate the society. Also, these organizations and institutions have several programs to implement, with the one established by the SINAPROC acting as one of the many.

The action courses for planning, preventing, and recovering are defined in the Organizational Manual for the National Civil Protection System Operation. According to this manual, the monitoring, planning, and control for disaster prevention of each event constitutes a sub-program. Moreover, each of these sub-programs has an executive coordination, a technical coordination, and co-responsible organizations. The executive coordination directs and integrates the planning, operation, and evaluation for disaster prevention actions. The technical coordination and the co-responsible organizations contribute support with resources, procedures, programs, and plans to the executive coordination.

The General Coordinating Body for Civil Protection in the Ministry of Government is in charge of synchronizing the implementation of the disaster prevention policy of the other ministries and institutions, which includes the Ministry of Social Development, Ministry of Environment and Natural Resources, Ministry of Trade and Industrial Development, Ministry of Public Health and National Water Commission, among others (See table A).

Table A. Executive and Technical Coordination and the Co-responsible Organization that constitute the SINAPROC

Type of Disaster	Responsibilities	Institution or Organization responsible
Geologic	Excutive Coordination	Ministry of Government
	Technical Coordination	Ministry of Social Development Ministry of Treasury Inspection
	Co-responsible Organization	SENER, SEDENA, SM, SHCP, SE, SEMARNAT, SCT, SEP, SS, SRA, PEMEX, CFE, UNAM, CANACINTRA, among others
Hydrometeorological	Excutive Coordination	Ministry of Government
	Technical Coordination	Ministry of Environment and Natural Resources National Water Commission
	Co-responsible Organization	SENER, SEDENA, SM, SHCP, SEDESOL, SAGARPA, SEP, SSA, SRA, PEMEX, CFE, UNAM, CANACINTRA, among others
Chemical	Excutive Coordination	Ministry of Government
	Technical Coordination	Ministry of Trade and Industrial Development Ministry of Economy Ministry of Communication and Transportation Ministry of Environment and Natural Resources
	Co-responsible Organization	SENER, SEDENA, SM, SHCP, SEDESOL, SEP, SSA, SRA, PEMEX, CFE, UNAM, ANIQ and IMP, among others
Health	Excutive Coordination	Ministry of Government
	Technical Coordination	Ministry of Environment and Natural Resources Ministry of Health
	Co-responsible Organization	SENER, SEDENA, SEM, SHCP, SE, SECOFI, SAGARPA, SEP, SRA, PEMEX, CFE, CNA, UNAM, IMSS, ISSSTE and CANACINTRA, among others

Social-Organizational	Excutive Coordination	Ministry of Government
	Technical Coordination	Ministry of Comunication and Transportation
	Co-responsible Organization	SENER, SEDENA, SM, SEDESOL, SHCP, SEP, SRA, PEMEX, UNAM, and CANACINTRA, among others

Source: SINAPROC.

Abbreviations

- SEDESOL= Ministry of Social Development
- SEMARNAT= Ministry of Environment and Natural Resources
- SSA= Ministry of Health
- SCT=Ministry of Comunication and Transportation
- CNA= National Water Commission
- SEP= Ministry of Education
- PEMEX= Mexican Oil
- SHCP= Ministry of Treasury and Public Credit
- SECOFI= Ministry of Trade and Industrial Development
- SE= Ministry of Economy
- CFE= Federal Electricy Commission
- SAGARPA= Ministry of Agriculture, Livestock, Rural Development, Fishing and Food
- UNAM= National Autonomous University of Mexico
- IMP= Mexican Oil Institute
- SEDENA= Ministry of National Defense
- SM= Ministry of Minery
- SENER= Ministry of Energy
- SS= Ministry of Security
- SRA= Ministry of the Agrarian Reform
- CANACINTRA=National Transformation Industry Chamber
- ANIQ=National Chemical Industry Association
- IMSS=Social Health Mexican Institute
- ISSSTE= Social Health Institute for the Governmental Worker



In 1990 the SINAPROC added the objective of implementing a policy focused on the prevention and not on the reconstruction after the disaster has occurred. The National Council for Civil Protection does the planning, coordination, and advisory for the civil protection, and it is constituted at the national level by the Federal President, 12 federal ministers, and the Chief of Government of the Federal District.

On the other hand, in the sub-national level this institution is integrated by the governors of the states and the municipalities' presidents, who are responsible for implementing the disaster prevention policy and coordinating the local Civil Protection System. It is important to mention that each council in the sub-national level has its technical groups for planning, preventing, and implementing the recovery strategies after disasters.



According with the SINAPROC and its Program for Civil Protection, 2001-2006, which constitutes a national regulatory instrument, the emergency states in which the disaster prevention policy is implemented are the following: pre-warning, warning, alarm,

emergency, and disaster. Each of these states requires particular actions and strategies for preventing the disaster occurrence. As it was mentioned, these actions and strategies implement and control the responsibility of particular ministries and institutions (See table B).



Table B. Actions According with the State of the Emergency

State of Emergency	Characteristics of the State	Actions Implemented
Pre-warning	Possible occurrence of a catastrophe	Prevention actions promoted by the local authorities
Warning	An imminent occurrence of a catastrophe	Elaboration for preparedness program for searching and rescuing actions
Alarm	A catastrophic phenomenon produces damage	State of alarm is declared and the emergency program is executed
Emergency	Health and security risk exceeds the society capacity to respond	State of emergency is declared and emergency program is executed.
Disaster	Society suffers severe damages that affect its social and economic structure and its vial and productive systems	President declares a state of disaster Federal programs are executed and the army intervenes with the DN Plans

Source: SINAPROC.



The Program for Civil Protection, 2001-2006, considers not just the prevention actions, but also those that are related to rescue and recovery. The SINAPROC determines the state emergencies and, then, it coordinates the responses of the ministries and other institutions involved. Once the emergency is resolved, the actions focused on for the reconstruction and the development of the coping capacities and resilience are the responsibilities of a particular ministry. However, this does not mean that the other ministries and institutions cannot collaborate in the emergency actions that are not their responsibility. Moreover, the disaster recovery is based on cooperation among governmental and non-governmental institutions (See table C).

Table C. Emergency Actions for Disasters Prevention and Recovery

Emergency Actions	Institution Responsible
Warning	Ministry of Government
Damage Assessment and Recovery	Ministry of Government CENAPRED
Emergency Plans Elaboration and Coordination	Ministry of Government National Center of Operations
Security Management	Ministry of Government
Search and Rescue Strategies	Ministry of National Defense Ministry of Government
Health Warranty	Ministry of Trade and Industrial Development Ministry of Public Health
Provision of Food and Medicines	Ministry of Government

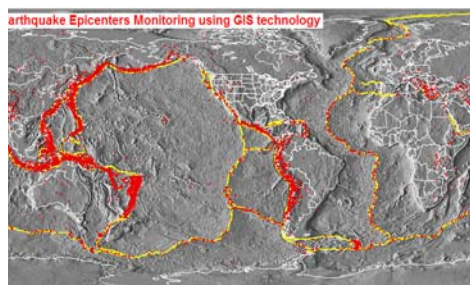
Source: SINAPROC.

In order for the SINAPROC to be prepared for preventing disasters and determining the kind of emergencies people will face, this organization has constituted several institutions responsible for monitoring events that can produce a natural disaster like earthquakes, hurricanes, cyclones, and volcanic explosions.



1. Earthquakes

The National Broad Band Seismology Network was designed by the Engineering Institute of the National Autonomous University of Mexico, who is also responsible for monitoring the earthquake activity in Mexico.



2. Hydrometeorological Events



Mexican authorities, the National Meteorological Institute, and the Regional Hurricane Centers in Miami and San Francisco analyze tropical cyclones, hurricanes, and the weather in order to develop the necessary measurements for reducing disaster loss for hydrometeorological events. These activities are collaborated with the Ministry of Agriculture and Water Resources and the Ministry of Government. Also, in disaster mitigation the scientific advisory committees, civil society organizations, and other non-governmental institutions participate.

3. Volcanic Eruptions



Four volcanoes are frequently monitored:

1. CENAPRED and the National Autonomous University of Mexico monitor Popocatepetl.
2. University of Colima monitors Colima.
3. The governments of Mexico and Guatemala monitor Tacaná.
4. CENAPRED and Veracruz University monitor Pico de Orizaba.

References

- Centro Nacional de Prevención de Desastres (1998), *Prevención*, Núm. 20, México, Cenapred.
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- Secretaría de Gobernación (1998), *Manual de Organización y Operación del Sistema Nacional de Protección Civil*, México, SINAPROC/Segob.
- (1995), *La prevención de los desastres en México*, Fascículo 1, México, Segob.

Web Pages

1. CENAPRED
www.cenapred.unam.mx
2. National Seismic Service
www.ssn.unam.mx/
3. SINAPROC
www.SINAPROC.gob.pa/

Knowledge Base Coding Reference:

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