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“Towards a Comprehensive Public Policy in Disasters Risk Management for Small and Medium Size Enterprises: The Case of Mexico “.

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Structure of the presentation:

- Vulnerability of Micro, Small and Medium Enterprises to natural hazards and their capacity to act as drivers of community recovery: The case of Mexico.
- Mexico’s National Civil Protection System (SINAPROC).
- Conceptual framework of Disaster Risk Management as Public Policy.
- Assessment of SINAPROC’S Financial Instruments:
  - FONDEN (National Fund for Natural Disasters)
  - FOPREDEN (Fund for Natural Disasters Prevention).
- Conclusion.
The Earthquakes of September 19–21, 1985

- 6,000 deaths*
- 20,000 injured
- 500 collapsed buildings
- US$ 4,100 million

Source: CENAPRED 2013, Presentation at the First Meeting of Urban and Environmental Research, El Colegio de México, May 2013

* THE SOCIO-ECONOMIC IMPACT OF MAJOR DISASTERS IN MEXICO IN THE PERIOD 1980-1999

Centro Nacional de Prevención de Desastres
Dólares o pesos?
Marco, 2013/04/22
Vulnerability of Micro, Small and Medium Enterprises to natural hazards and their capacity to act as drivers of community recovery: The case of Mexico*.

* The following considerations are based on the results of the study funded by UNDP on “Small Businesses: Impact of Disasters and Building Resilience”, and the case studies conducted in Mexico, Japan and India.
Assumptions:

- Micro, Small and Medium Enterprises (MSMEs) are key factors in the restoration of the social and economic fabrics after a disaster and the achievement of community resilience.
- MSMEs are disproportionately affected by disasters, compared to bigger firms with access to a broader set of coping strategies.
- However, they have an inherent flexibility due to the lower levels of capital needed to operate and their work relations (especially in the case of informal MSMEs), which could be exploited after disasters to support a faster and more equitable recovery of the local community.
- The role of MSMEs in disaster recovery depends on their own ability to withstand disasters and having the right incentives in place.
- Resilience of MSMEs should start by tackling the socio-economic drivers of risk in the pre-disaster stage.
- MSMEs’ vulnerability to natural hazards can be reversed by promoting enabling pre- and post-disaster environments for MSMEs to use entrepreneurship as a driver of local economic and social recovery.
### Table 1 | Business Unit-Type: Selected Variables, Mexico, 2009

<table>
<thead>
<tr>
<th>Business Unit Type</th>
<th>Business Units: %</th>
<th>Workforce: %</th>
<th>Remunerations: %</th>
<th>Contribution GDP: %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>95.3</td>
<td>45.6</td>
<td>11.5</td>
<td>15</td>
</tr>
<tr>
<td>Small</td>
<td>4.3</td>
<td>23.8</td>
<td>24.9</td>
<td>14.5</td>
</tr>
<tr>
<td>Medium</td>
<td>0.3</td>
<td>9.1</td>
<td>14</td>
<td>22.5</td>
</tr>
<tr>
<td>Large</td>
<td>0.2</td>
<td>21.5</td>
<td>49.6</td>
<td>48</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
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</tr>
</tbody>
</table>
• In 2008 there were 3,724,019 registered businesses in the country, employing a workforce of around 20.1 million.

• 98% of this businesses came from three sectors: trade and commerce, manufacturing and services (INEGI, 2010).

• Micro-firms contribute to family income in: trade and commerce (97.1 percent); manufacturing (92.5 percent); services (94.4 percent).

• Trade and commerce firms represent the highest total contribution of the three sectors (1.8 million) and employ a workforce of over 6 million. This sector contributes 9.8 percent towards Mexico’s GDP.

• Micro-firms constitute 97.1 percent of all units, 65.1 percent of employees.
The majority of all registered firms in Mexico are employed in Tertiary economic activities.

Mexico’s economically active population was 45.4 million in 2012, of which approximately 13 million (29 percent) made up the informal sector.

Family-run micro-firms in commerce and services make up the vast majority of businesses in Mexico, for its informality, being placed in extremely hazardous locations and lack of financial aid, they are highly vulnerable and not resilient.

In recent decades the country has changed from a predominantly rural society to one based largely on services and commerce. These trends have increased factors of vulnerability and risk in urban centers; with migration resulting in the growth of unplanned settlements.
## MSME Risk Drivers: Meteorological Hazards and Vulnerabilities

<table>
<thead>
<tr>
<th>Meteorological Hazards</th>
<th>Physical Environment</th>
<th>Socio-Economic</th>
<th>Organizational Policy</th>
<th>Strategic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intense rainfall</td>
<td>Inappropriate urban planning</td>
<td>Marginalization and Poverty</td>
<td>Poor coordination amongst actors</td>
<td>Extortion</td>
</tr>
<tr>
<td>Hurricanes</td>
<td>Deforestation</td>
<td>Prevalence of Infectious Diseases</td>
<td>Disruption</td>
<td></td>
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<tr>
<td>Flooding</td>
<td>Erosion</td>
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<td>River</td>
<td>Contamination</td>
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<td>overflow</td>
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<tr>
<td>Hailstorms</td>
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<td>Heat waves</td>
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<tr>
<td>Drought</td>
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<td></td>
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<tr>
<td>Frosts</td>
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</tbody>
</table>

In conclusion:

The main problems to strengthen Micro, Small and Medium Enterprises (MSMEs) entrepreneurship as a driver of local economic and social recovery and resilience capacity are:

- The magnitude of the informal sector in the economy
- Lack of compliance of urban land use plans, even if they are based on risk assessments.
September 2013: “Manuel” Hurricane
Floods in Acapulco City

Main affected Areas and its correspondence with Acapulco’s “Natural Hazards Atlas”, 2004, Northeast Zone

In Summary: The Evolution of Civil Protection

1985 Earthquake

1986-2002

- SINAPROC
- FONDEN
- GENERAL CIVIL PROTECTION ACT
- FIPREDEN

EMERGENCY CIVIL PROTECTION SYSTEM

2003-2012

- DRM
- FINANCIAL INSTRUMENTS: FOPREDEN-FONDEN-FIPREDEN
- NEW GENERAL CIVIL PROTECTION ACT

PREVENTIVE CIVIL PROTECTION SYSTEM

Source: CENAPRED 2013, Presentation at the First Meeting of Urban and Environmental Research, El Colegio de México, May 2013
Dólares o pesos?
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Mexico’s Disaster Funding Structure

Federal Ministries

Programs for MSMEs

Government Levels

Risk Management Funding

Source: Based on the 2013 “Small Business, Impact of Disasters and Building Resilience” Study.
Towards a Comprehensive Risk and Disaster Management as Public Policy
### Axiological Normative Axes

<table>
<thead>
<tr>
<th>Efficiency and Equity</th>
<th>Comprehensive</th>
<th>Inter-sectorial Coordination</th>
<th>Co-Responsibility</th>
<th>Accountability</th>
</tr>
</thead>
</table>

Source: Based on Puente (s/f), Foundations for a Comprehensive Risk Management System (SGIR), Draft document.
An empirical comparative analysis of Mexico’s Financial Funds as Framework of MSMEs’ Resilience

**FONDEN** (Natural Disasters Fund) - **FOPREDEN** (Natural Disasters Prevention Fund) 2004-2012
FONDEN-FOPREDEN Normative Relation for a Public Policy Resources Allocation, based on the transition from Emergency to Prevention

FONDEN-FOPREDEN Normative Ratio 1/5 - 1/7
FONDEN-FOPREDEN normative ratio (1/5) in Resource Allocation. Mexico 2004-2012 (US$ million)

Source: Based on www.proteccioncivil.gob.mx data. The FONDEN sums refer to resources authorized by disaster declaration, and are presented by year of release.
Conclusions

MSMEs Resilience Policy requires full awareness and compliance of the following issues:
A sound implementation of the existing Legal and Financial Framework:

- to promote and enable pre- and post-disaster environments for MSMEs to use entrepreneurship as a driver of local economic and social recovery.
- to reduce MSMEs informal sector.

Enforcement of Urban Land Use Plans and Development Programs, in order to implement a comprehensive Risk Management Policy.

Decision making process should rigorously observe the proposed Public Policy Normative Axes.
Thank You

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