

# Small Businesses: Impact of Disasters and Building Resilience SYNTHESIS REPORT

Case Studies from Japan, Mexico and India





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**Authors**: Chitra Padmanabhan

**Editing**: Chitra Padmanabhan

Design and Layout: Sindhuja Khajuria



# **Synthesis Report**

A Case Study in Japan, Mexico and India on Small Businesses: Impact of Disasters and Building Resilience

Analysing the vulnerability of Micro, Small, and Medium Enterprises to natural hazards and their capacity to act as drivers of community recovery

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## List of Acronyms

BA Business Association

BCM Business Continuity Management

BCP Business Continuity Plan
BCPL Business Continuity Planning
BCM Business Continuity Management

CCI Chamber of Commerce and Industry (Japan)

CEPAL Cómisión Ecónómica para America Latina y el Cariba/Economic

Commission for Latin America and the Caribbean (ECLAC)

CENAPRED Centro Nacional de Prevención de Desastres/National Centre of Disaster

Prevention

CSR Corporate Social Responsibility
DDMP District Disaster Management Plan

DRM Disaster Risk Management
DRR Disaster Risk Reduction

ENAMIN Encuesta Nacional de Micronegocios/National Survey of Micro-businesses

ERM Enterprise Risk Management

FIECH Federación Indígena Ecológica de Chiapas/Ecological Indigenous Federation

of Chiapas

FONDEN Fondo de Desastres Naturales/ Natural Disaster Fund

FY Financial Year

GAR Global Assessment Report on Disaster Risk Reduction

GDP Gross Domestic Product
GEJE Great East Japan Earthquake

INEGI Instituto Nacional de Estadística y Geografía/National Institute of Statistics

and Geography

METI Ministry of Economy, Trade and Industry (Japan)

MG-NREGS Mahatma Gandhi National Rural Employment Guarantee Scheme

MSME Micro, Small and Medium Enterprise NGO Non-Governmental Organization

NPS Nuclear Power Station
Q&A Questions & Answers

SME Small and Medium Enterprise

SMRJ Organization for Small & Medium Enterprises and Regional Innovation

Japan

SPYME Subsecretaría para la Micro, Pequeña y Mediana Empresa/ Sub-Ministry for

Micro, Small and Medium Enterprises

UNCTD United Nations Conference on Trade and Development

UNDP United Nations Development Programme

UNISDR United Nations International Strategy for Disaster Reduction

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## Introduction

In 2012, the United Nations Development Programme (UNDP) undertook a global study analysing the vulnerability of Micro, Small, and Medium Enterprises (MSMEs) to natural hazards and their capacity to act as drivers of community recovery. In order to inform the study, UNDP commissioned three case studies on the impact of disasters on MSMEs in Japan, Mexico and India to examine the recovery policies and measures undertaken to revive a sector that has a vital economic and social role to play in each of the countries. The objective was to make available the documentation that would help policy makers and other stakeholders conceptualize and implement appropriate recovery and disaster-preparedness measures to increase the resilience of MSMEs and, by extension, of the economy and the community. As a matter of fact, currently there are few such studies on this subject.

Each of the country studies looks at the impact of specific disasters on MSMEs. The Japan study dwells on the aftermath of the 2011 Great East Japan Earthquake (GEJE) in the north-eastern Tohoku region, described as the most devastating disaster in Japan's modern history. The Mexico study focuses on the aftermath of severe floods in the two southern states of Tabasco (2007) and Chiapas (2010), which are frequently prone to storm-related events due to which MSMEs have incurred severe damage and loss in recent years. The India study draws lessons from the impact of the 2011 floods on MSMEs in the Odisha state, which is prone to cyclones and floods owing to its large coastline

## Acknowledgements

The preparation of the global study "Small Businesses: Impact of Disasters and Building Resilience' was coordinated by the Disaster Risk Reduction and Recovery Team of the former Bureau for Crisis Prevention and Recovery in UNDP New York under the technical supervision of Angeles Arenas, Chiara Mellucci and Krishna Vatsa, who collectively supported the compilation of the case study in this report. The lead writer of the study, Mariana Infante Villarroel, provided the guidance to the consultants John Pyle, Iizuka Ryoko and Mihir Bhat, who prepared the country case studies that contributed to the final version of this synthesis report - by undertaking research in Mexico, Japan and India respectively.

The Poverty Group of the former Bureau of Development Policy in UNDP New York contributed to conceptualizing the study and other colleagues from different UNDP units provided insightful contributions and comments throughout the study formulation process. DRR experts and colleagues from the International Recovery Platform and UN Office for Disaster Risk Reduction (UN-ISDR) were also consulted during the preparation and supported the contribution of this study as a valuable contribution to the 2013 Global Assessment Report (GAR) on Disaster Risk Reduction.



## **Executive Summary**

This report brings together all three studies, presenting an opportunity to examine the issue of MSMEs and disasters across the spectrum of development, from the high-income economy of Japan to Mexico's middle-income economy and the lower-middle income economy of India.

The document reflects the strengths and limitations of each study as it touches upon:

- the significance of the MSME sector and its characteristics;
- the extent to which the damage suffered by the MSME sector affects the overall economy;
- the type of institutional, policy and market arrangements that exist to enable recovery and make MSMEs more resilient; and
- the extent to which MSMEs can contribute to their own recovery in a post-disaster situation by adopting practices that strengthens their resilience and enhance disaster risk reduction (DRR). Thus facilitating timely and sustainable recovery of the community as well.

The report is divided into four chapters:

- Chapter 1 explains the rationale for a study of the impact of disasters on MSMEs in Japan, Mexico and India by foregrounding the significance of the sector and describing the characteristics of MSMEs in each country context.
- Chapter 2 details the impact of specific disasters on MSMEs in each of the countries.
- Chapter 3 throws light on the existing recovery framework in Japan, Mexico and India with regard to MSMEs and enumerates the post-disaster measures taken in each context.
- Chapter 4 touches upon the challenges encountered during the recovery process
  of MSMEs and on the lessons learnt, providing recommendations for the
  effective recovery of the MSME sector, whether it is part of a developed or
  developing country.

Each country study provides valuable insights. On the one hand is a high-income economy such as Japan, where the MSME sector, comprising 99 percent of all enterprises in the country and dominated by micro enterprises, constitutes the backbone of the economy. Such is its level of integration into the national and global economy. Exposed to frequent disasters of all types and scale, Japan is among the most disaster-prepared nations in the world.

Yet, when the most catastrophic disaster in its modern history struck Japan on 11 March 2011, it inflicted unimaginable damage on infrastructure, the economy and society as a whole in the affected region and beyond. Thousands of MSMEs were devastated by the earthquake which triggered a tsunami in the coastal areas of north-east Japan and set off an accident at the Tokyo Electric Power Company's nuclear power station (NPS) in

Fukushima, leading to evacuation of affected areas.

The GEJE's massive scale of impact across several prefectures and many municipalities posed a new challenge with regard to the recovery of MSMEs, demanding an approach combining the importance of a national-level response with sensitivity to local contexts and their specific issues. Aided by its depth of institutional and policy experience, Japan acted swiftly to create a new recovery policy framework for a 10-year period that included stakeholders across the board.

Simultaneously, there was a release of much-needed funds through supplementary budgets to evolve multi-pronged initiatives for the revival of micro enterprises, such as in the crucial fishery and marine-related sector, or for efforts to contain the fallout of the NPS accident in the form of apprehensions about radiation levels. A unity of purpose, sense of urgency and a spirit of collaboration among the various actors working at different levels was the keyword. The revival of MSMEs was perceived as a national priority, based on an acute understanding of their critical role in securing the overall revival of the regional and national economy, the resilience of the global supply chain, and the community. The study documents this effort in a meticulous manner, demonstrating a depth and expanse of data collection on the GEJE's impact on MSMEs and on the recovery process.

The Mexico case study presents a different picture. It examines the impact of major floods in Tabasco and Chiapas on MSMEs, focusing on micro enterprises in the larger context of a sector affected by disasters throughout the country on an annual basis. The MSME sector in Tabasco suffered severe flood damage every year from 2007 to 2011, not least due to unplanned urban growth, while Chiapas, which comes last in Mexico's Human Development Index (HDI) and has the second highest marginalized population in the country, witnesses localized flood events that cripple its MSME sector.

Of the two main themes that frame the study, the first pertains to the persisting vulnerability of MSMEs, especially micro enterprises, to disasters. They comprise more than 90 percent of all business activities, playing a vital role in the community, yet a large percentage, due to their informal status, have little or no access to credit or financial support from government institutions in the aftermath of a disaster. Among them are a large number of female-operated, home-based enterprises which stand to lose business and home income simultaneously.

The second theme is of the absence of DRR concerns pertaining to MSMEs in Mexico's federal institutional and policy framework which otherwise has done appreciable work in addressing social vulnerabilities. While emergency support through institutional funding is quick, it is inadequate to revive enterprises and not innovatively tied to DRR concerns such as business risk management packages; in some cases this assistance may even be given in violation of federal DRR norms by municipalities.

The study encountered a problematic lack of data and concrete figures to help evaluate recovery in a meaningful manner, pointing to the need for more accountability and transparency in governance. Certain positive trends are highlighted, namely inspiring acts of self-recovery by coffee growing cooperatives in Chiapas or the state's attempt to create

a manual for disaster recovery for MSMEs in a context where there is a lack of private sector DRR initiatives that could help micro enterprises.

In India, too, the MSME sector is acknowledged for its growth potential and for providing the maximum employment after agriculture. In spite of that, this sector is excluded from the nation's institutional and policy framework of disaster management as well as recovery plans. In the event of disasters, institutional funding toward emergency assistance to enterprises is clubbed under general livelihood support measures, with little thought for specific considerations that affect MSME recovery. Further, more than 90 percent of micro firms in India exist in the informal economy. They have to rely on their ingenuity to adapt and carry on (even in the formalized MSME sector, insurance penetration rests at 1 percent).

Against this larger backdrop, the India case study looks at the manner in which micro enterprises were impacted by the severe floods of 2011 in Odisha. It foregrounds the need to focus not only on vulnerability to large-scale disasters but also on the frequent nature of localized events which cumulatively have a greater impact on communities.

A survey of four flood affected villages in Puri District revealed a micro-level trading scenario of goods and services including about 50 crafts that represent Odisha's cultural heritage, agricultural activities, fishing and carpentry. The biggest problem encountered during the study was the absence of any database or tools to even identify the damage and loss suffered by these micro enterprises. What the study recorded clearly was the instinct for self-recovery among the micro enterprises that held the community together and revived the local economy by creating alternate means of livelihood in times of crisis, especially for the marginalized and disadvantaged sections. The study points out that if an administration open to innovative possibilities recognizes the pool of expertise possessed by these micro enterprises, making them part of the recovery effort, as indeed many of the owners demanded, an ecosystem conducive to recovery can be created.

#### **Impact of Disasters on MSMEs**

MSMEs are affected differently by disasters. These differences are determined by the type of hazard, risk exposure or context-specific vulnerabilities (exogenous variables), as well as from the characteristics of MSMEs, which increase or decrease vulnerability to natural hazards (endogenous variables). Analysing the differential impact of disasters on MSMEs can shed light on what form adequate support to MSMEs might take.

Exogenous variables such as the type of risk exposure determine the level of damage (which can be catastrophic in the case of intensive risk) and the potential for adaptation and better coping (recurrent extensive risk). Disruptions such as physical damage can cause severe financial stress, while lack of basic service provision can compromise swift reopening and exacerbate medium- and long-term disruptions such as population dislocation. The latter can severely hinder MSMEs operations due to a reduction in staff supply and customer base. Lastly, the legal and regulatory frameworks can influence financial and spatial vulnerabilities, particularly so for informal MSMEs operating in unsafe premises and out of the reach of DRM programmes and tools (e.g. insurance).

Endogenous variables can help explain individual business shocks on MSMEs belonging to the same context, exposed to the same level and type of risk, and facing similar disruptions. For instance, evidence shows that MSMEs in different industries can be affected differently by disasters. Despite heavy initial disruptions, MSMEs in the retail sector, particularly informal entrepreneurs, can recover faster compared to those in other sectors and serve as a buffer during times of crisis. MSMEs engaged in manufacture can lose critical assets and staff, which can generate long closure periods and compromise business continuity. After a short-term collapse, MSMEs in tourism tend to bounce back unless recovery strategies for the sector exclude them on the basis of value-chain upgrade or resettlement policies (informal entrepreneurs are particularly at risk). The construction sector can temporarily benefit from reconstruction efforts though projects usually involve large, unaffected construction firms. Lastly, environment-dependent MSMEs can be considered one of the worse off sectors, given the severe disruption disasters pose to the availability of natural resources and the time it takes for ecosystems to recover.

Other endogenous variables that make a difference in terms of impact of disasters on MSMEs include business size, level of informality, location, previous experience of business owners with disasters, pre-disaster business performance, and ownership of premises. Evidence is inconclusive in relation to variables such as age of the firm or gender of firm owners, though if gender-biased vulnerability is present in a society, it is likely to be found among MSMEs.

Most small businesses, whether formal or informal, operating in developed or developing countries, tend to rely on personal savings and networks to cope with disasters. In the case of developed countries where special recovery funds and insurance are widely available and accessed, MSMEs tend to prioritize or complement formal coping mechanisms with individual informal ones. In developing countries, informal coping strategies are often not chosen but imposed by the absence and/or insufficiency of formal mechanisms that guarantee business owners' own survival, as well as that of their business.

#### **Post-Disaster Response and Recovery Support**

Achieving effective post-disaster recovery is often influenced by actions taken immediately after disaster; this is particularly so in the case of MSMEs, whose business continuity is threatened by prolonged closure periods and population dislocation. However, post-disaster response and recovery usually has a stronger focus on infrastructure restoration and other elements of household recovery than on economic resilience, leaving business continuity and livelihood restoration as marginal programme components.

Effective post-disaster recovery involving MSMEs as engines of local socio-economic recovery requires public investment to focus on the right mix of 'hard' infrastructure restoration and 'soft' socio-economic policies. Adequate 'hard' policies can include restoration of basic services that can enable MSMEs to continue operations while preventing population dislocation. Housing should be seen as an essential component of livelihood recovery, determining and even serving as primary input (e.g. home-based MSMEs) of productive processes (Pribadi, 2005). Hence, emergency response involving relocation can include temporary operating locations such as those accommodating displaced households (Zhang et al., 2004). During the recovery phase, unconnected housing and livelihood recovery programmes that can negatively affect the restoration of MSME operations should be avoided.

Large-scale projects are the most efficient way of restoring damaged infrastructure but they are likely to exclude local businesses and workers if not carefully designed. Labor-intensive infrastructure projects that explicitly prioritize local contracting can better serve the recovery of MSMEs by involving them directly in recovery processes and stimulating local-level employment and production, while minimizing the redistributive effect of disasters in favor of larger (usually outside) businesses (Lyons et al., 2010).

'Soft' livelihood recovery programmes can include emergency employment, cash and inkind aid, and microfinance. 'Cash-for-Work' and other emergency support programmes can be useful safety nets to help communities restore the necessary basic infrastructure, local demand, and personal capital needed for MSMEs to operate. Grants can be a more direct way of providing MSMEs with the necessary capital for business continuity and, when given promptly after disasters, can be more effective than emergency employment in supporting the recovery of MSMEs. However, cash is effective as long as markets function; hence the importance of well-designed in-kind support programmes that facilitate MSME access to productive inputs when markets are heavily disrupted by disasters (e.g. MSMEs in manufacture exposed to intensive risk). If designed well, microcredit programmes linked to sustainable income-generating activities can be an option to support the transition between disaster response and medium-term economic recovery.

Central and local governments' roles can facilitate recovery strategies for MSMEs. Financial, technical and political support roles could be better allocated to central-level institutions that generally have greater capacity and decision-making power than disaster-affected local governments (UN, 2011). The main advantages of central governments'

coordination of recovery priorities lie in the robust budgets they could leverage from their own or donated resources, and the potential to coordinate different stakeholders (the international community, private sector, regional/local government offices) to simultaneously address the different components of integral post-disaster recovery. Central governments also have the role of ensuring that the business environment, if not totally stable, remains predictable for MSMEs and other members of the community, allowing optimal decision making with regard to the recovery processes (Chamlee-Right and Storr, 2008).

By building on pre-disaster partnership and knowledge, local-level institutions can mobilize adequate response to affected MSMEs and minimize disruptions in their operations. Local governments are also better placed to identify the role MSMEs can play in disaster response. Practical areas for local governments to make a difference in the recovery of MSMEs are the provision of alternative workspaces (e.g. as part of the temporary resettlement programmes), and the coordination of debris removal and other activities that need local labor and that can facilitate the return of the affected population (De Ruiter, 2011). Local governments also have the potential to effectively engage in longer-term planning processes with post-disaster communities and build on pre-disaster partnerships to ensure local MSMEs are part of new development strategies.

Other stakeholders such as development partners, non-governmental organizations (NGOs) and business associations (BAs) are instrumental in helping governments after disasters. Donors can help governments finance response, recovery and reconstruction strategies. However, this support can have mixed effects in the recovery of MSMEs due to the favoring of large infrastructure projects and the upgrade of certain industries (tourism is a recurrent example), both of which can translates into the exclusion of local MSMEs. NGOs' traditional focus on 'soft' socio-economic initiatives concentrating on livelihood recovery, as opposed to major infrastructure projects has been found to complement donor-funded 'hard' recovery programmes (Regnier et al., 2008). NGOs are well placed to support government efforts in transitioning from emergency response to long-term economic and social recovery by establishing links between different stakeholders. NGOs can also support MSME recovery to the extent that they provide the necessary technical and financial inputs for MSMEs to resume operations and avoid replacing private sector activities with aid. NGOs should also complement government efforts rather than replace them. BAs can ensure that disaster response meets the needs of MSMEs thanks to their matchless private sector knowledge and can facilitate the intervention of bigger firms in the framework of Corporate Social Responsibility (CSR).

#### **Policy Approaches**

Livelihood strategies in the post-disaster stage appear to face two main issues: they can be relatively ignored by recovery programmes or they can be addressed in a way that does not support local community recovery. In both cases, the potential for MSMEs to be drivers of local socio-economic recovery is undermined. These issues are intimately related to pre-disaster conditions of disaster-affected areas. Poor and vulnerable communities that have been ignored by public policy are likely to see their livelihood restoration as a

marginal component of disaster recovery. Large-scale economic recovery projects can equally ignore local livelihood strategies and bring external initiatives with little or negative impact to communities.

Therefore, resilience of MSMEs should start by tackling socio-economic drivers of risk in pre-disaster stage. This can be done through ensuring an adequate investment climate for MSMEs to thrive and build resilience to shocks, and through interventions that can support resilience building more directly.

Ensuring an adequate investment climate requires policy makers to be aware of the importance and role that MSMEs have in local economic dynamics, which can facilitate the design of relocation and recovery programmes that support livelihood recovery. Legal and regulatory frameworks that effectively address issues such as insecurity of tenure, informality, land use planning and building codes, can in turn encourage MSMEs' investments in DRM and market diversification. Direct interventions for building resilience of MSMEs before disasters can draw on the support of BAs and community groups to design and communicate DRM strategies, as well as help MSMEs be less dependent on local markets by diversifying their supply and customer base. Having social protection systems in place can help decrease the possibility of individual shocks, while having in place systems that can provide swift support after disasters.

Enterprise recovery programmes that respond to context-specific needs of different industries, through cash in-kind and technical support, can help reverse the 'inherent' vulnerability of MSMEs to disasters by maximizing the flexibility that fewer assets and employees give to MSMEs compared to larger firms. Microfinance products tailored to the needs of MSMEs can ensure that recovery is effective and sustainable.



# Chapter I

A general introduction to the MSME sector

Vulnerability quotient of MSMEs

MSMEs in Japan

MSMEs in Mexico

MSMEs in India

Conclusions

### Chapter I

### I.I : A general introduction to the MSME sector

Across the world, MSMEs have been acknowledged as engines of growth, driving productivity and innovation. Characterized by requirements of low investment, flexibility of operations and a much greater labour to capital ratio than big businesses, they play a significant role in economies across the development spectrum. For instance:

- in Japan's high-income economy, MSMEs comprise the 99.7 percent of enterprises in the non-primary sector, providing 66 percent of its total employment, equalling to one fourth of the total turnover in the wholesale sector and one fifth of the total turnover in the manufacturing sector;
- in Mexico's middle income economy, MSMEs constitute approximately the 99 percent of all businesses in the country (CEPAL, 2006; INEGI, 2009), employ 72 percent of the total workforce (CEPAL, 2006; SPYME, 2010), and contribute 52 percent of the national GDP (SPYME, 2010; CIPI, 2012); and
- in India's lower middle income economy, MSMEs contribute nearly to the 8 percent of the country's GDP, 45 percent of the manufacturing output and 40 percent of exports, providing the largest source of employment after agriculture.



Marked by dynamism and adaptive capacities bestowed by their size, MSMEs have been recognized for their growth potential in local and global markets, and national and international value chains, apart from being a significant source of employment generation. However, due to their size, MSMEs also tend to be disproportionately affected by disasters by way of damage to or loss of assets, infrastructure, service capacity and client base. Until now there have been few attempts to study the impact of disasters on them in different scenarios and the means by which they can recover. Studies on MSMEs generally focus on their competitive aspects in a global scenario, while recovery strategies usually focus on household vulnerabilities. But aided by timely and innovative measures based on an understanding of their specific strengths and vulnerabilities, MSMEs recover much faster than large businesses. Moreover, they are often the first responders after a disaster, having an existing relationship with the affected community and a vested interest in promoting a speedy and resilient recovery.

#### 1.2 : Vulnerability quotient of MSMEs

The chief factor determining the impact of a disaster on MSMEs is their vulnerability related to aspects such as their degree of formalization and financial integration into the economy, and the extent to which they have access to risk insurance mechanisms. Simply put, greater the integration of MSMEs into the formal economy, lesser their vulnerability. Formal MSMEs technically have a social security net and access to government support programmes such as start-up support, general advice, access to credit and, more importantly, financial support in times of

crises. Informal MSMEs are bereft of these advantages.

Context-specific factors such as location and type of business also influence an MSME's degree of vulnerability to disaster risk, apart from factors such as pre-existing levels of disaster preparedness and post-disaster recovery decisions. These, in turn, depend on how far the sector is recognized as part of the overall framework of DRR and recovery support in a policy and institutional context.

## 1.3 : Micro, small and medium enterprises in Japan

Japan is a prime example of the formal and robust integration of its MSMEs into the economic grid at the local, national and international level. They comprise 99.7 percent of a total of 4,213,000 enterprises in the non-primary industry. Of these, 87 percent are small/micro enterprises. Of a

total of 42,970,000 employees in Japan, 66 percent are employed by MSMEs (21.2 percent by small/micro enterprises and 44.7 percent by medium enterprises (Small and Medium Enterprise - SME Agency, 2013)<sup>2</sup>.

 $<sup>^2</sup>$ The term MSMEs is used throughout the report except in the official names where SME is used, since the Japanese definition of small enterprises includes micro enterprises. (http://msme.gov.in)

	SMEs	Of which Small (Micro) Enterprises		
Industry	Capital	No. of Regular Employees	No. of Regular Employees	
Manufacturing, construction, transport, others (excluding 2–4)	Up to 300 million yen (around \$3.6 million)	Up to 300	Up to 20	
Wholesale	Up to 100 million yen	Up to 100	Up to 5	
Services	Up to 50 million yen	Up to 100	Up to 5	
Retail	Up to 50 million yen	Up to 50	Up to 5	

## a. Significant presence of MSMEs in Tohoku

Although the proportion of MSMEs in the four affected prefectures in Tohoku (236,273 enterprises, representing 99.8 percent of the total sector) indicates a similar pattern in terms of their overall proportion across Japan, the number of employees indicates a higher proportion of employment provision by MSMEs (85.3 percent of the total employees in Tohoku) compared with the overall figure in Japan (66 percent). These data highlight how vital the recovery of MSMEs is for economy and households' livelihood in the region.

MSMEs have a more dominant presence in Tohoku in more than one sector of the economy. For instance, mining and manufacturing, and services, each contribute about 25 percent of the GDP in Tohoku region. Similarly, the proportion of GDP contributed by the agriculture, forestry and fisheries, construction, transportation, and mining and manufacturing sectors is 1.6 percent to 2 percent higher compared with their corresponding contribution to Japan's overall GDP (METI, 2012). Hence, any damage to the MSMEs operating in these sectors is

bound to impact the regional economy to a great extent.

While the GEJE affected all sectors, those near the coast that required or benefited from proximity to the ocean and ports were especially devastated, such as marine-related and other manufacturing industries, tourist accommodations, and the wholesale and retail industry. Among these industries, as the tables below show:

- wholesale and retail comprises the largest proportion of MSME enterprises (higher than the overall figure for Japan);
- wholesale and retail, and manufacturing have the maximum workforce (19.5 percent and 15 percent) in the tsunami-affected region; and
- wholesale and retail, fisheries, and construction account for a higher proportion of employees (between 1.5 percent and 2 percent) compared with the overall national figure.

These features of the MSME sector in Tohoku are indicative of the extent of damage and loss suffered by the sectors.

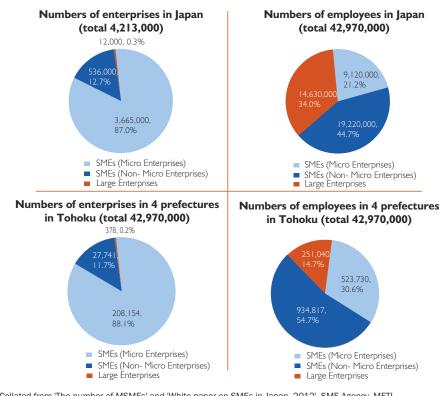


Figure 1: Description of MSMEs sector in Japan and in Tohoku region

Source: Collated from 'The number of MSMEs' and 'White paper on SMEs in Japan, 2012', SME Agency, METI.



Figure 2: Breakdown of enterprises by industry

Note: 'Others' include mining; electricity, gas, heat supply, and water; information and communications; transport; finance and insurance; real estate; eating and drinking services and accommodations; medical, healthcare and welfare; education and learning support; services not elsewhere classified, government services; and unclassifiable industries.

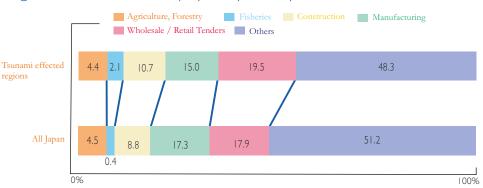


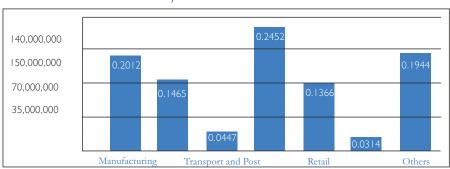
Figure 3: Breakdown of employees by industry

Source: 'White paper on SMEs in Japan, 2011', SME Agency, METI.

#### b. MSMEs key to regional recovery

Since almost all the enterprises affected by the disaster were MSMEs and they play such an important role in the economy and employment in the Tohuku region, their recovery holds the key to the socioeconomic recovery of the region and its inhabitants. Here it is worth pointing out that Japan, which is frequently exposed to disasters of different types and scale, is among the most disaster-prepared nations in the world. Yet, thousands of MSMEs bore the brunt of the disaster, especially the tsunami, in the Tohoku region and indirectly in other areas as well. This has prompted a multipronged collaborative effort to revive the MSME sector in a 10-year recovery time frame, with a renewed approach to urban planning in the context of DRR.

Figure 4: Annual turnover 2010 by sector with % of the total MSMEs turnover

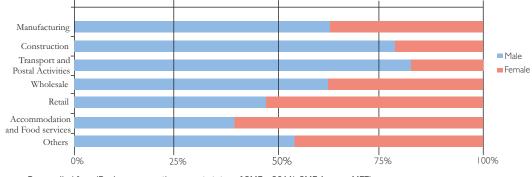


Source: Recompiled from 'Basic survey on the current status of SMEs, 2011', SME Agency, METI.

#### The gender divide

Varying recovery demands and challenges faced by industries could have unintentional gender implications during recovery. For instance, the construction sector, which employs more men, faces a boom during recovery while the accommodation sector, which employs more women, often faces problems due to a decline in tourism following a disaster. This situation exacerbates existing trends, for Japan's construction sector has the fourth largest number of employees (2.9 million) and higher turnover (14.6 percent) than the accommodation and food services sector, with the third highest number of employees (3.1 million) but a much lower turnover (3.1 percent), indicating lower profits in a sector that employs 60 percent women.

Figure 5: Proportion of workers by gender (Japan)



Source: Recompiled from 'Basic survey on the current status of SMEs, 2011', SME Agency, METI.

Note: The sectors included in 'others' includes real estate, information and communications, scientific research, living-related services and other services.

Table 2: Number of MSMEs affected by the disaster

		SMEs		Of whi (micro Enterp	,	All Enterprises (SMEs & Large Enterprises)
		No. of enterprises	% of total	No. of enterprises	% of total	No. of enterprises
	4 Tohoku prefectures	77,053	99.9	67,548	87.5	77,163
	Total (4 Tohoku and other prefectures)	120,622	99.9	105,837	87.6	120,784
Tsunami- affected areas	Of which, Survey districts (severely affected)	38,053	99.9	33,732	88.6	38,086
Radiation- restricted /	Municipalities in Fukushima	7,284	100	6,512	89.4	7,286
evacuation areas	Of which, Survey districts (severely affected)	3,162	100	2,790	88.2	3,162

Note: Percentage of total indicates the percentage of small/micro enterprises as a proportion of all enterprises.

Source: Recompiled from 'White paper on SMEs in Japan, 2012', SME Agency, METI



#### 1.4: Micro, small and medium enterprises in Mexico

MSMEs comprise all but 0.2 percent of the total commercial enterprises in Mexico. Significantly, 95.3 percent of these MSMEs are micro enterprises (INEGI, 2010). Family-operated micro businesses in trade and commerce, manufacturing and services, many of them run by women, constitute the majority of businesses in Mexico but their contribution to GDP is small in comparison with other types of businesses. In the event of a disaster, the home and business simultaneously suffer damage, greatly impacting female-run firms as women generally provide more income exclusively for the home than men (Malhotra et al., 2002). Insurance policy adoption remains low among MSMEs in spite of known risks. Moreover, insurance companies do not recognize the MSME sector as a separate entity.

The self-employed are included in the categorization and since 2006 agricultural and aquaculture producers have been included in it.

Like most developing countries, Mexico, too, has formal and informal enterprises. To be eligible for any federal government support programme or post-disaster recovery support, an enterprise must register with the Ministry of Finance Tax

Administration Service (Sistema de AdministraciónTributaria / SAT) and pay taxes as per its income level. Other options are to register with the local municipality, the health ministry or the Ministry of Economy (Secretaría de Economía), but none of these can help secure government access to credit or post-disaster assistance. In 2008, there were 3,724,019 properly formalized MSME businesses with a workforce of 20.1 million, dominated by micro enterprises, according to the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía/INEGI) (INEGI, 2010).

According to another survey, the 2008 National Survey of Micro-businesses (Encuesta Nacional de Micronegocios-/ENAMIN), out of over 8.4 million businesses in 2008, about 1.9 million had registered with the local municipality, while 5.8 million (69 percent) were unregistered. Lacking access to financial services or social security, most micro businesses are carried out in homes, on streets, squares and transport stations. Many fall in the category of self-employment, accompanied by other (unpaid) family members (EGAP, 2011; CESOP, 2004; Samaniego, 2007).

Table 3: Categorisation of MSMEs under the 'law for the development of competitiveness of MSMEs. 2002<sup>3</sup>

Business type	Sector	Number of Employees	Annual Turnover (US\$ million)	
Micro	All	<10	< 0.3	
Small	Trade & Commerce	11-30	0.3 – 7.7	
SITIdII	Industry; Services	11-50	7.7 – 7.7	
	Trade & Commerce	31-100	7.7 – 19.2	
Medium	Services	51-100	7.7 – 19.2	
	Industry	51-250	7.7 – 19.2	

Source: Diario Oficial de la Federación (2012).

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#### Enterprises in terms of gender and location

According to ENAMIN's 2008 survey, female employers comprised 25 percent of over one million employers in various sectors (53 percent in the services industry and 31 percent in trade and commerce). Among seven million self-employed individuals, there were more women (50.2 percent), especially in trade and commerce (64 percent) and manufacturing (56 percent), typically with small trading ventures within the home (or on the street outside), including convenience stores, cheap food stalls, textiles and crafts.

#### a. MSMEs in Tabasco and Chiapas

In 2009, of the estimated 50,000 firms in business in Tabasco, more than 47,000 (95 percent) constituted micro firms. In Chiapas, out of 127,000 registered businesses, more than 124,000 (97 percent) comprised micro firms.

While there is a gender gap across MSMEs in both states, micro firms (largely in trade and commerce) have a 49 percent female presence in Chiapas (possibly due to low wages in Chiapas necessitating a second income or due to high levels of male migration) and 47 percent in Tabasco.

Informal employment has a significant bearing on the vulnerability of a developing country's population. In 2012, informal employment in Tabasco was estimated at 29 percent of the economically active population (equalling the national figure) and at 29 percent in Chiapas. The proportion of paid workers without any legal benefits was estimated to be 45 percent in Tabasco and 55 percent in

Chiapas as against the national figure of 42 percent (INEGI). Unprotected, half the population in Chiapas is vulnerable to any disaster. In Tabasco, females with children are more likely to be part of the informal sector than females without children.

Additionally, practices such as the location of many micro businesses in high risk zones, with the permission of local authorities, has further increased the vulnerability of the MSME sector.

According to the 2008 National Survey of Microbusinesses (Encuesta Nacional de Micronegocios/ ENAMIN), out of over 8.4 million businesses in 2008, about 1.9 million had registered with the local municipality, while 5.8 million (69 percent)were unregistered.

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Table 4: Business unit type (Mexico 2009)

Business Unit Type	Business Units: %	Workforce: %	Remunerations: %	Contribution GDP: %
Micro	95.3	45.6	11.5	15
Small	4.3	23.8	24.9	14.5
Medium	0.3	9.1	14	22.5
Large	0.2	21.5	49.6	48
Total	100	100	100	100

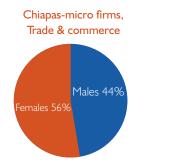
Table 5: Enamin micro-business survey 2008: registered/non-registered commercial enterprises (selected sectors)

Sector	# Units	%	Municipality	%	Health	%	Economy	%	Non- Registered	%
Total Units	8,414,679		1,963,281		338,059		250,137		5,863,202	
Manufacturing	1,318,170	16	165,983	8	44,046	13	29,268	12	1,078,873	18
T&C/Services	3,349,694	40	993,790	50	92,735	27	104,666	42	2,158,503	37
Construction	577,384	7	15,800	0.8	818	0.2	4,816	2	555,950	9

Note: Not all sectors were included in the analysis, hence absolute totals and percentages do not correspond.

Source: ENAMIN, 2008.

Figure 6: Female representation in Chiapas and Tabasco MSME sector.







#### 1.5: Micro, small and medium enterprises in India

What India has in common with Mexico is the gap between the formalized and informal enterprises, the latter sans access to financial services or social security nets. According to the latest Census of 2011, the registered MSME sector has an estimated 1.56 million enterprises (45.23 percent of them in rural areas<sup>4</sup>), of which 94.94 percent are micro businesses (67 percent in manufacturing and 32.9 in services). The labour to capital ratio and overall growth in the MSME sector is far greater than in large industries.<sup>5</sup>

These figures pale in comparison to the number of informal enterprises and their workforce. More than 94 percent of Indian MSMEs fall in the informal or unorganized sector. According to the National Commission for Enterprises in the Unorganized Sector, which describes an unorganized sector enterprise as employing less than 10 workers, there were 58 million informal enterprises in India in 2006-2007 with a workforce of 104 million. More than half of the workers were classified as 'self-employed' and without access to any social security schemes, which therefore makes them even more vulnerable to disasters.

Formal MSMEs in India are largely grouped into geographical 'clusters', each specializing in a particular industry, value chain or product, such as Tiruppur's garment industry, Jalandhar's sports goods industry, Ludhiana's knit work and hosiery industry, and the National Capital Region's auto-ancillary industry. While the Finance Commission of India considers insurance a feasible option for low-frequency-high impact disasters, the current level of insurance penetration in India is only 1 percent (FC, GoI 2009: 202).

a. MSMEs in Odisha

Odisha is home to 111,856 MSME units with an investment of Rs. 403 billion (about USD 6 million), providing employment to 648,851 individuals, as per the official estimates of 2010-2011.9 The sector, second only to agriculture in employment generation, includes repair work and servicing, food services, and glass and ceramic work. This sector also includes 50 different crafts practiced by 120,000 artisans in a state known as the land of handicrafts, from jewellery and pottery to stone carving, among others. However, this cottage industry represents a declining trend: There were 7596 such enterprises in 2010-11 as opposed to 13,063 units in 2006-07.

MSMEs in rural Odisha typically engage in micro-level trading of goods and services, agricultural activities, fishing, and carpentry. For the most part, they carry out only one type of business activity, which is usually a secondary source of income for their owners. Due to their small size, limited assets, remoteness and location in vulnerable areas they face formidable challenges in accessing markets, credit and materials and also experience environmental degradation and disasters, among others.

According to the National Commission for Enterprises in the Unorganized Sector, which describes an unorganized sector enterprise as employing less than 10 workers, there were 58 million informal enterprises in India in 2006-2007 with a workforce of 104 million. More than half of the workers were classified as 'selfemployed' and without access to any social securityschemes, which therefore makes them even more vulnerable to disasters.



Table 6: Classification of MSMEs (India)<sup>6</sup>

Classification	Manufacturing Enterprises*	Service Enterprises**
Micro	Rs. 2.5 million / Rs. 25 lakh	Rs. 1 million / Rs. 10 lakh
Small	Rs.50 million / Rs. 5 crore	Rs. 20 million / Rs 2 crore
Medium	Rs 100 million / Rs 10 crore	Rs. 50 million / Rs 5 crore

<sup>\*</sup> Investment limit in plant and machinery

#### Size is no barrier

Despite their small size, MSMEs play an extremely large role in the community by providing employment and empowerment opportunities for vulnerable sections, including women, by diversifying and stimulating local economies.

#### 1.6: Conclusions

The role of MSME sector in all the economies, from high income to lower middle income countries is quite significant. Formalization emerges as one of the most significant aspects to have a bearing on the vulnerability of MSMEs. The next couple of chapters explains the impact of disasters on MSMEs and the recovery process initiated in Japan, Mexico and India.

<sup>\*\*</sup> Investment limit in equipment

<sup>&</sup>lt;sup>4</sup>According to the 2011-2012 Annual Report of the Ministry of Micro, Small and Medium Enterprises (MMSME), of the total working enterprises, the proportion of micro, small and medium enterprises were 94.94 percent, 4.89 percent and 0.17 percent respectively. About 67.10 percent were in the manufacturing sector and 32.90 percent in the services sector (including repair and maintenance), New Delhi: MMSME, http://msme.gov.in/MSME-Annual-Report-2011-12-English.pdf

<sup>&</sup>lt;sup>5</sup>Gol, 'Report of the Prime Minister's Taskforce on Micro, Small and Medium Enterprises', January 2010, p 1

 $<sup>^6\</sup>text{MMSME 2012, Annual Report 2011-2012, New Delhi: MMSME, http://msme.gov.in/MSME-Annual-Report-2011-12-English.pdf}$ 

<sup>&</sup>lt;sup>7</sup>Gol, Planning Commission, 2012, Twelfth Five-Year Plan (2012–2017) Economic Sectors, Volume 2, New Delhi:Gol, http://planningcommission.nic.in/plans/planrel/12thplan/pdf/vol\_2.pdf

<sup>&</sup>lt;sup>6</sup>Gol, 2012, Report of Prime Minister's Task Force on Micro, Small and Medium Enterprises, Gol, New Delhi. http://msme.gov.in/PM\_MSME\_Task\_Force\_Jan2010.pdf

<sup>&</sup>lt;sup>9</sup>Government of Odisha, 2012, Economic Survey 2011-2012, Bhubaneswar.

www.odisha.gov.in/p&c/Download/Economic survey 2011 12.pdf



# **Chapter 2**

MSMEs and the impact of disasters

Japan: the aftermath of the Great Eastern Japan Earthquake

Mexico: impact of flooding in Tabasco and Chiapas

India: impact of 2011 Odisha floods

#### 2.1: MSMEs and the impact of disasters

This chapter highlights the impact of specific disasters on the MSME sector in Japan, Mexico and India. In the following aspects:

- assessment of damages and losses;
- direct and indirect effects of the disaster and the various sectors affected by the disaster;
- the extent of closures of MSMEs; and
- the impact on the larger economy and business recovery rate.

In Japan, the GEJE struck large areas of the Tohoku region across several prefectures and many municipalities. Thousands of micro enterprises that comprise the backbone of the economy, were affected in different ways by the tsunami, the earthquake, and/or the Fukushima Daiichi NPS accident. While the tsunami devastated the marine-related industry, factories, shops, industrial facilities, and tourism-related enterprises, among others, the local economy, was extremely damaged by the evacuation of Fukushima and by the rumours of radiation. Additionally, due to their business linkages with affected enterprises, national MSMEs outside the disaster-stricken areas as well as international ones, were also indirectly affected.

In Mexico, the economic damage wreaked by the 2007 floods in Tabasco rivalled many national disasters that the country has witnessed in recent years. Micro enterprises were the worst hit, most of them are in the informal sector and are characterized by a high level of vulnerability. The floods inflicted more damage on the commerce sector, particularly on female-run, home-based enterprises, since the disaster had a direct impact on both

their business and household income. Many of them were engaged in selling food items and providing personal services, among others.

In rural areas, female activities in cropping, animal rearing or aquaculture for the market came to a resounding halt. The impact of the 2010 floods in Chiapas on MSMEs is seen against a backdrop of frequently occurring storm-related events, with emphasis on localized events that can have a debilitating impact on rural communities.

At the other end of the spectrum is the Indian example. In its attempt to assess the damage and loss sustained by micro enterprises in the four flood-affected villages in Puri District following the 2011 floods in Odisha, the survey foregrounded the difficulty of assessing the impact suffered by invisible, informal enterprises. Whether it was fisher folk, grocers, vegetable vendors, jewellers or potters, they, too, did not raise the issue of loss of assets during the floods, so blurred were the lines between household and business income in activities largely carried out of home.

Moreover, due to the lack of any database, the survey could only glean the general impact of the floods on livelihoods as accentuating the debt cycle in the absence of any official means of credit support, and heightening an already existing vulnerability. Also, the study highlighted the need to take into account the cumulate impact of small localised frequent disasters that have characterised the area and steadily weakened the local socioeconomic fabric.

## 2.2 : Japan: the aftermath of the Great Eastern Japan Earthquake

The magnitude 9.0 earthquake that struck off the Pacific coast of Japan's northeastern region of Tohoku on 11 March 2011 was the fourth largest earthquake ever recorded in the world. The earthquake triggered a massive tsunami affecting over 500 km of coastline (total area of 561sq km) across six prefectures (Geographical Survey Institute, 2011) with catastrophic consequences. Among the prefectures most severely and directly affected by the earthquake and tsunami were Miyagi, Iwate and Fukushima.

The total damage to infrastructure and other property was estimated at between 16 trillion yen to 25 trillion yen (approximately US\$ 193 – US\$ 300 billion)<sup>10</sup>, far exceeding the damage of 9.6 trillion yen caused by the Great Hanshin Earthquake in 1995 (Cabinet Office, 2011). The earthquake also triggered the Fukushima Dai-ichi NPS accident, following which areas within a 20 km radius were evacuated.



Source : Miyako City 2011 Tsunami in Miyako City (Iwate Prefecture)

#### a. Impact in affected areas

Of the 120,000 enterprises in the region,

40,000 MSMEs were affected by the tsunami and the NPS accident. These included 38,000 businesses in the tsunami-affected areas and about 3,100 enterprises in the restricted/evacuated areas. About 780 enterprises were affected both by the tsunami and the NPS accident.

Factories, shops, industrial facilities and equipment bore the brunt of the tsunami in coastal areas: 54 percent of the traditional marine-related enterprises were completely destroyed, and 42 percent were partly destroyed. In earthquake-affected areas untouched by the tsunami, damage to buildings, the phenomenon of liquefaction<sup>11</sup>, and aftershocks disrupted the distribution network, hampering business activities.

In Fukushima, the evacuation of 160,000 residents, the uncertain prospects of immediate resumption of businesses and apprehensions about radiation effects brought the local economy to a virtual standstill: the tourist inflow declined by 38.4 percent compared with the previous year (Sankei Shimbun, 2012), affecting 50 percent of the workforce in the area employed in retail, hotels and restaurants.

## b. Effect on MSMEs by industry and location

The fishery industry was the worst hit by the GEJE (METI, 2012). According to the 'Survey on the conditions of SMEs affected by the GEJE' conducted by Teikoku Databank (TDB) in January 2012 with a sample of 5,048 affected enterprises, less than half the seafood product businesses (49.8 percent) resumed

<sup>&</sup>lt;sup>10</sup>The US dollar exchange rate fluctuated a great deal after the disaster, from 82.9 yen on March 10 (one day before the disaster) to 76.8 yen on March 17 and 85.0 yen in early April 2011. Taking the overall average in the period, the figures have been calculated at 82.5 yen to a dollar in this report.

business as compared to 66.7 percent among non-manufacturing and manufacturing industry (excluding the seafood products industry).

Tourism, too, was hard hit as the number of foreign tourists visiting the Fukushima prefecture diminished by over 85 percent (Fukushima, 2012) largely due to apprehensions about radiation effects. Overall, such apprehensions had a deleterious effect: MSME activities in agriculture, forestry and fishery sectors were affected as export consignments were restricted, rejected or sold at reduced prices. The manufacturing sector also experienced consignment rejections long with demands for tests showing an absence of increased levels of radiation. As of January 2012, 34 factories had moved out of the prefecture and three had closed their business. TDB's survey revealed that the resumption rate of MSMEs in Fukushima was 40.6 percent as opposed to 65.6 percent in the tsunamiaffected areas, indicating a greater magnitude of impact brought upon by the NPS accident (METI, 2012).

#### c. Impact on MSMEs across Japan

The disaster affected MSMEs across Japan as well. According to a monthly national survey of trends in the small business sector conducted by the Japan Finance Corporation a month after the disaster (in April 2011), 50 percent of MSMEs mentioned a "shortage and soaring prices of goods traded" as factors most likely to affect them, 30 percent spoke of a "mood of restraint and increased economizing," and 10 percent referred to the "damage sustained by business partners" impacting their activities (METI, 2011). According to a TDB survey in April 2011, 57.6 percent of

the enterprises across Japan expected a decline in demand. This included 66.8 percent of the retail enterprises interviewed, followed by 63.9 percent enterprises in agriculture, forestry and fishery, and 64.4 percent enterprises in the services sector.

#### d. Closures in the MSME sector

In May 2011, barely two months after the disaster, 131 enterprises went bankrupt (TDB survey, 2011), a figure 2.5 times higher than the figure for the same time period following the Hanshin Awaji Earthquake in 1995. The majority of bankruptcies resulted from indirect causes such as decline in sales due to disaster-affected partners (29.0 percent), a mood of restrained consumption (26.7 percent), and difficulty in procurement due to affected partners (13 percent); the disaster directly accounted for only 13.7 percent of the bankruptcies.

About 5,923 micro-enterprises went bankrupt in 2011, comprising 51.8 percent of the total bankruptcy among enterprises. While the overall bankruptcy figures showed a modest decline from 2010 owing to various financial support measures, the figures for micro enterprises showed a 3.4 percent increase during the same time period. However, Tohoku showed a different trend: the figure of 161 bankruptcies among micro enterprises in 2011 showed a 21.8 percent decline from the previous year largely due to bailout measures that contributed to a temporary reduction in bankruptcy - TDB (2012).

### e. Impact on the larger economy and business recovery rate

In the immediate aftermath of the disaster, the disruption of distribution

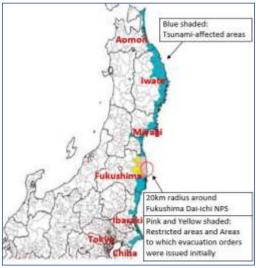
Liquefaction is the process of soil suddenly losing strength most commonly as a result of ground shaking during a large earthquake. Liquefied soil, like water, cannot support the weight of anything lying above it, be it surface layers of dry soil or the concrete floors of buildings. This can lead to subsidence due to the loss of soil beneath and a consequent loss of support to building foundations (Institution of Professional Engineers of New Zealand, 2011).

networks had a significant, nationwide impact on supply chains. In Tohoku, the indices of industrial production of March 2011 showed a decline of 90 percent in the petroleum products industry, 60 percent in the furniture, iron and steel, and paper industries.

Outside Tohoku, the transport equipment industry experienced a decline of 30-50 percent followed by a 14.5 percent to 16.5 percent decline in the non-ferrous metals industry due to disruptions in the supply of raw materials and parts from MSMEs in the affected regions (METI, 2011). However, supply chains recovered quickly and the national economy was back to the pre-GEJE level four months from the disaster in terms of production (seasonally-adjusted figure compared to 2005)

and exports (percentage change from a year earlier) (METI, 2011).

Figure 7: Tsunami-affected areas and NPS-restricted areas.



Source : SME Agency, 'White paper on SMEsin Japan 2012'

#### Marine industry complex in shambles

The Kurile and Kuroshio currents that account for a vast variety of fish in Iwate and Miyagi prefectures in Tohoku have long formed the basis of an efficient industrial complex in their coastal cities, from offshore fisheries and aqua-farming industries to fish markets, cold storage facilities, marine product-processing factories, small shipyards, iron work factories, and electricity and ship radio businesses (Seki, 2011).

The tsunami devastated everything. Without cold storage facilities and processing factories, fisher folk could not sell fish; without iron works industries and ship radio businesses they found it difficult to maintain their boats and facilities. Their recovery was not possible without the recovery of the entire industrial complex (Seki, 2011).



### 2.3: Mexico: the impact of flooding in Tabasco and Chiapas

#### a. The Tabasco flooding of 2007

In terms of economic damages and losses, the Tabasco flooding of 2007 was national in scale and it was one of the costliest experienced by Mexico in recent times. The local economy was severely affected, especially in the state capital Villahermosa where approximately 20,000 of Tabasco's 47,000 firms (40 percent) were located in low-lying floodplains turned into urban settlements (CEPAL, 2012). This, combined with poor planning of hydrological infrastructure such as dams and a repeated tendency for authorities to ignore the informal settlements has resulted in severe flood damage every year from 2007 to 2011. In terms of economic damage, the 2007 disaster resulted in an estimated loss of US\$ 3.1 billion for one relatively small state, amounting to about 29.3 percent of the state's GDP.

## b. Impact of the disaster on MSMEs by sector

MSMEs in commerce (33 percent) and agriculture (28 percent) suffered the worst damage, followed by the social sector, including housing, health, education, and culture (19 percent), and infrastructure (18 percent) (CENAPRED, 2007, p.283). About 31,229 employees, more than 50 percent in trade and commerce, were affected by the disaster.

#### c. Micro enterprises worst hit

Damage across the categories of micro, small and medium businesses was not uniform: micro enterprises suffered worse damage proportionally (64.5 percent) than small (20.5 percent) and medium (4.5 percent) businesses (CENAPRED, 2007, p.391). This stems from the fragile

economy of micro firms combined with their physical vulnerability to disasters, making them harder for them to absorb shocks. Of the 24,842 MSMEs that sought financial support, 95 percent were micro businesses.

### d. Effect on female-operated micro firms and household income

The impact on female-operated MSMEs and, subsequently, on overall household income, was considerable. It was calculated that of the 10,555 MSMEs that were flooded, 4,172 enterprises were home-based micro businesses selling food items, manufacturing and selling clothes, and providing personal services. Further, it was calculated that 76 percent of all self-employed females in Tabasco operated their businesses from home. Of these, 80 percent were involved in commercial activities, 10 percent in the manufacture of goods; and 10 percent in services (CENA-PRED, 2009).

The damage to these micro businesses, spread over 17 urban municipalities, was estimated at US\$ 1.2 million, with trade and commerce sectors experiencing the maximum damage of US\$ 1 million. The estimated loss of earnings within three months from the disaster was estimated at US\$ 2 million.

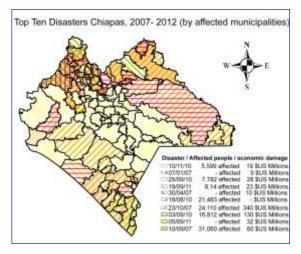
An important source of female employment in Tabasco's rural communities includes 'backyard' rearing of animals and growing crops, artisanal work, and aquaculture activities subsidized by the municipal government. The fledgling aquaculture industry was decimated, resulting in losses of \$US 15,000 due to delays in fish farming. The backyard plots, on which many women were harvesting

corn and beans for market sales to raise money for aquaculture inputs, were destroyed. Small producers rearing poultry for the lucrative Christmas and New Year sales sustained 100 percent losses totalling US\$ 333,000. Artisans specializing in cane products sustained losses of US\$ 550 per person over the season because their raw material lay rotting in the fields. Female workers were forced into more precarious economic activities such as selling tamales and raffle tickets.

#### e. Chiapas: the impact of stormrelated disasters

In Chiapas, the 10 most severe disasters between 2007 and 2012 were all storm-related events. This study looks at two disaster events which had considerable impact on MSMEs: heavy rainfall in August 2010 in the state capital of Tuxtla Gutierrez, and severe flooding in northern Chiapas caused by Tropical Storm Matthew in September 2010. The Yajalón municipality, particularly, is highly vulne-rable to the effects of flooding on account of being located immediately adjacent to watercourses.

In terms of damage to MSMEs, 2010 was the worst year: in August, 126 MSMEs in Tuxtla Gutierrez suffered flood damage; in September, 589 MSMEs were affected by Tropical Storm Matthew, 284 of them in Yajalón alone. Of those, 32 were located in the highly vulnerable downtown area of Barrio Chulhá adjacent to the Chulha River. The direct losses experienced by the damage to the 284 MSMEs were estimated at US\$ 188,500, while the indirect losses were estimated at US\$ 60,000. The localized Yajalón event highlights the tremendous impact such events can have on the livelihoods of rural communities. However, the study came up against a lack of sufficient data on MSME closures.



#### Assessment procedures following disasters

After any disaster, damage assessments on an individual basis are conducted in the days following a declaration by the Governing Council of the MSME Fund (Consejo Directivo del Fondo PyMe), which comes under the Ministry of Economy and the National Business Solidarity Support Fund (Fondo Nacional de Apoyo para las Empresas de Solidaridad). Once it is established that a business qualifies for support, standard evaluation forms are drawn up to determine the appropriate extent of support (Ministry of Economy, 2012).

Table 7: Municipalities affected in Chiapas, August & September 2010 & MSMEs losses (US\$)

Municipality	MSMEs Affected	Direct Losses \$US	Indirect Losses \$US	Total \$US
Tuxtla Gutierrez	126	No data available	No data available	No data available
Yajalon	284	188,500	60,000	248,500
Tila	44			
Tumbalá	66	46,000	14,000	60,000
Salto de Agua	47	74,000	22,000	96,000
Sitalá	12	76,000	23,000	99,000
Chilón	10	18,000	5,000	23,000
Total	589	402,500	124,000	526,500

Source: Adapted from CENAPRED, 2012, p.224; Ministry of Economy, 2012. The two events in Tuxtla Gutierrez and Yajalón cost the MSME Fund a total of US\$ 304,000 in emergency support. According to a Ministry of Economy report, these funds safeguarded the employment positions of 673 workers (431 men and 242 women) (Ministry of Economy, 2012)

#### MSMEs absent in risk reduction plans

In Tabasco and Chiapas, several municipalities and communities have formulated risk reduction plans. But there are no specific references to MSMEs in any of these plans. The Yajalon area has one municipal plan and six community plans, but even after the 2010 floods there is a general lack of attention on the disaster risks faced by MSMEs. Whether it is a study of past disasters or a question of making contingency plans for the future, the focus is on social vulnerability.

### 2.4: India: the impact of 2011 Odisha floods

Odisha's long coastline is affected by cyclones and storm surges causing floods almost on a regular basis, rendering it vulnerable to loss of life, property and economic losses. While much attention is directed toward large-scale, catastrophic disasters, frequent localized disasters of a smaller scale are generally overlooked, while they cumulatively have a greater impact on enterprises and communities. For instance, the 2011 floods in Odisha came after a period of severe drought in many districts of the state, which was in

turn preceded by a spate of floods.

In August 2011, unabated rains in the neighbouring state of Chhattisgarh raised the water levels in the Hirakaud Dam to such a level that the excess water had to be discharged into the Mahanadi river system, the largest in Odisha. The resulting floods affected 48,976 villages, 1,067 Gram Panchayats and 21 urban bodies, 3.34 million people across 102 blocks, 0.32 million hectares of crops, and key infrastructure and essential services.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup>Government of Odisha, 2011, Report on 2011 Odisha Floods p. 24.

## a. Problems of identifying damages and losses sustained by MSMEs

The field survey of the four flood-affected villages of Balapur, Madhuban, Jaipur and Icchapur in Puri District covered enterprises such as grocery stores, coir manufacturers, jewellers, vegetable vendors, fishermen, potters, stone carvers and Self-Help Groups. While the identification of damage and loss to MSME businesses is central to forging effective response and recovery efforts, the loss of MSME assets was not mentioned by the villagers in the initial discussions at all. Some of them mentioned about the loss of individual shelters and agriculture, but not businesses per se.

The detailed group narratives of community recovery referred to MSME owners as key figures in material distribution and facilitation of financial transactions, but more as individuals engaged in social service than in their capacity as business enterprise owners.

This low visibility of MSMEs can be attributed to the fact that many of them are run out of the owners' homes, which makes it more difficult to specify the location of the business premises. Such operations also blur the separation between household and income generation/business activities to the extent that MSME owners also did not account for their home-based work in coir spinning, handicraft, carving and incense production as business activities.

The study points out that this invisibility of MSME concerns in the context of disasters is reflected in the policy and institutional context as well. Consequently,

there is little official data on damage and loss or closure suffered by MSMEs. Therefore, this study is restricted to enumerating the overall key impacts of the floods on MSMEs in the villages.

### b. An overview of the impact of floods

While the type of MSMEs determined the range and nature of disaster impact they suffered, some key impacts were common to all.

Livelihoods were affected as tools, livestock and property were washed away or damaged, roads became inaccessible, and surrounding lands remained waterlogged for months. This was particularly devastating for MSME owners (even those not involved in farming or fishing activities) as they had built their businesses around the local environment, relying upon neighbouring villages and towns for customers, resources and trade.

Hampered by the lack of tools and materials, MSME entrepreneurs were unable to function. Many owners were forced to empty their savings, take loans from family, friends or private lenders, or engage in temporary jobs to provide for their families. The impact of actual damage was heightened by the fact that limited access to finance and credit, and borrowings from private sources, generally at exorbitant rates, further trapped the MSME and its owner in a cycle of debt and poverty. In some cases, ownership of land or livestock, or the operation of the MSME as a family business, by providing an alternative source of income, occasionally served as mitigating factors.

"Disasters affect our livelihood. All our savings were spent on overcoming the losses incurred during the disaster. In addition to providing for my family, I now have the responsibility of repaying the money I borrowed after floods."

Daitan Maharana, Co-Owner of Family Carpentry Business, Balapur Village, Puri District

## c. Inherent vulnerabilities of MSMEs heightened by the disaster

The floods exacerbated the existing vulnerabilities of MSMEs. Given their size and limited resources, MSMEs are less able to withstand the fluctuations in market conditions, sudden shocks and stresses, changing consumer demands, staff shortages and disruptions in supply. The lack of proper infrastructure and essential services further adds to the risk. In the event of a disaster or extreme weather event, MSMEs could be affected to such an extent that they may never resume business or do so after a long lag. This can have a devastating impact on the local economy, families, and community. MSMEs owned by people from disadvantaged sections, such as a scheduled caste or tribe are more prone to be impacted by a crisis.

### d. Low resilience in the face of disaster

Across all four villages, the resilience of MSMEs to disasters was extremely low. Marked by poverty, most MSME owners like the larger community-lived and operated their businesses out of mud and thatch houses which were either washed away or damaged in each bout of flooding. Owners had no way of preparing themselves for disasters by storing their products, livestock and tools in safe places. Very few had access to flood and cyclone shelters, and hardly any had savings or emergency provisions.

None of the owners, even those whose businesses had been established for more than a decade, and who were well-acquainted with the impacts of disasters upon their businesses, had the safety net of insurance. For the most part this was due to

a lack of awareness about insurance schemes, but there was some scepticism too in some quarters. Marked by a lack of preparedness, MSMEs were faced with the prospect of shutting down or operating at a greatly diminished capacity, or resorting to temporary employment.

"I want to expand my business, but the debt incurred during the 2011 floods is preventing me from doing so. A stabilizer loan can keep business afloat. A late loan helps but helps slowly." Punchara Sahoo, Grocery Shop Owner, Jaipur Village, Puri

District



## **Chapter 3**

Policies and initiatives for the recovery of the MSME sector

Japan: a multi-pronged effort

Mexico: tackling long standing issues in MSMEs' recovery

India: role of the MSME sector as a driver of recovery

Conclusions

### 3.1: Policies and initiatives for the recovery of the MSME sector

This chapter throws light on the recovery measures undertaken in Japan, Mexico and India in the wake of specific disasters. The diverse socio-economic terrains of Japan, Mexico and India highlights the varying levels of a culture of recovery, from a collaborative effort among all actors in Japan to a somewhat inconsistent narrative emerging from a lack of complete integration of the MSME sector into the larger economy in Mexico and India.

By acting swiftly to put in place a recovery framework and carrying all stakeholders along, the Japanese government ensured a unity of purpose at different levels of the recovery process, whether in the critical area of the marine industrial complex devastated by the tsunami or in the task of countering apprehensions about radiation levels following the NPS accident in Fukushima, which affected virtually every kind of enterprise.

The national government formulated and implemented a wide array of financial support programmes ranging from loans, guarantee support and employment assistance; prefectural and municipal governments immediately reached out to affected MSMEs with appropriate schemes; chambers of commerce and industry, and other business associations used their networks to help enterprises get 'idle' machines and also provide them information about financial support schemes and training inputs; and large corporates kept competitiveness at bay while unfurling CSR efforts even as many affected enterprises

performed inspiring acts of self-recovery while helping the community and industry.

Several new initiatives in the history of disaster support in Japan were launched, such as the provision of temporary factories, shops and other facilities, and the provision of subsidies for groups of enterprises. Further, dialogue among various actors on conceptualizing a long-term recovery of MSMEs through a platform titled Future Meeting (*Mirai-Kaigi*), and efforts to address apprehensions of radiation levels along the value chain gained the status of national priorities.

In contrast, the Mexico case study highlights the factors affecting the post-disaster recovery of MSMEs in a developing country where the sector's integration into the economy is less than complete, with a considerable number of enterprises and employees bereft of access to institutional credit and post-disaster assistance.

Following the severe Tabasco disaster, the accent was on providing an opportunity to MSMEs to get formalized so as to be able to access government assistance. This support largely comprised a one-time subsidy to affected enterprises by the Ministry of Economy, vouchers to workers by other ministries, and credit support under a permanent natural disaster support programme of the state-owned financial institution *Nacional Financimiento* (Nafinsa).

In Chiapas, the Ministry of Economy's MSME Fund (FondoPyMe) geared up to provide financial and consultancy support to MSMEs. An exemplary act of self-recovery by a coffee growers' cooperative in the state's Sierra Madre region, and the state government's move to develop a manual for disaster recovery with a specific component on MSMEs to address a vital lacuna in its recovery framework were some of the notable developments.

This section situates the recovery measures against a larger backdrop of non-transparency in governance, lack of integration of DRR concerns into measures of institutional financial support, and inadequate DRR awareness among municipalities that creates disturbing anomalies.

From a middle-income economy to a lower-middle-income economy like India, similarly characterized by a large informal sector, the issues of post-disaster recovery of MSMEs become more pronounced. The survey of flood-affected villages in Puri District found that any assistance for

MSMEs is generally subsumed under general livelihood support measures, since existing disaster preparedness, relief and recovery programmes, codes, policies and guidelines at national, state and district levels do not address MSME concerns.

What came through most clearly in the survey was the thrust of local MSMEs toward self-recovery, leading to the recovery of the local economy and the local community. They did so by offering a significant source of livelihood other than agriculture in a post-floods scenario, providing a network for information communication regarding relief and recovery, and their own expertise in reconstruction activities. Above all, they provided a means to marginalized groups to restart their lives after the floods. In fact, one of the major demands articulated by the MSMEs was for a greater role in recovery and DRR processes. This section also contrasts the ingenuity shown by MSMEs with the absence of innovative DRR practices on the part of the corporate sector.



### 3.2 : Japan: a multi-pronged effort

## a. Policy and institutional context for recovery support to MSMEs

A policy framework supporting the recovery process is essential for the recovery itself to be effective. Based on the suggestions of the Reconstruction Design Council, created right after the GEJE to function under the National Cabinet, the government issued 'Basic Guidelines and Basic Act on Reconstruction' in about four months to lay the grid for the recovery effort.

In February 2012, less than a year after the disaster, the National Reconstruction Agency was established to promote and coordinate recovery policies and measures, and support recovery projects to be implemented by the municipalities, functioning as a single point contact for local governments. Emphasizing local perspectives and initiatives in the recovery process, the Reconstruction Agency, located in Tokyo, functions through local Reconstruction Bureaus in the affected Iwate, Miyagi and Fukushima prefectures, supported by two branch bureaus in the respective prefectures.

To swiftly implement recovery initiatives by means of cross-cutting coordination, the Reconstruction Bureaus have a Recovery Coordination Team in each municipality. These teams comprise experts and staff from various sectors drawn from the national, prefectural and city governments, and from the Urban Renaissance Agency. The sectors normally covered by the team members include ports, fisheries, agriculture, industry promotion, community planning, and housing (Reconstruction Agency, 2012).

Further, in April 2012, the Reconstruction Agency established Enterprise Coordination Promotion Units in Tokyo and in the respective Bureaus specifically to promote the recovery and revitalization of regional and local industries. Reaffirming the importance of collaboration among enterprises, municipalities and the national government, the Enterprise Coordination Promotion Units promote initiatives such as enabling dialogue between affected municipalities and enterprises, supporting the implementation of enterprise coordination projects, organizing seminars and exhibitions, supporting local events and festivals, collecting good recovery practices, and developing Q&A guidelines for MSMEs (Reconstruction Agency, 2012).

The following figure provides a brief timeline of the major budgetary approvals, policies and support measures initiated post-GEJE.

#### **Catering to recovery**

Located in Miyagi prefecture, Kesennuma City's commercial district was determined to revive itself and the community through the buzz of hot meals. Making use of the Temporary Factories, Shops and Other Facilities Project, the city built a temporary shopping district on a 1,700 square metre plot leased for two years. Fukko Yatai Mura Co., Ltd., established in July 2011, inaugurated Fukko Yatai Mura (Food Stall Village for Recovery) in November 2011. Restaurants and shops could reopen without any capital since the managing firm paid the initial costs of the facilities, furnishings and equipment. By March 2012, Fukko Yatai Mura boasted 16 restaurants and six stores selling fresh meals and food products, attracting customers and tourists from Kesennuma and beyond (METI, 2012) (Fukko Yatai Mura, Interview, 2013).

#### b. Measures taken by the government

The Japanese government responded with a broad spectrum of initiatives, some completely new in the history of recovery efforts in Japan.

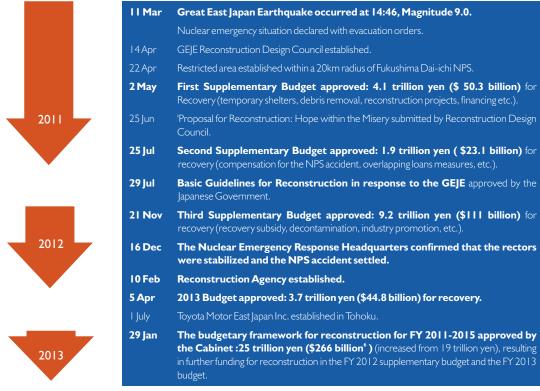
#### Loans and guarantee support

The Government of Japan launched a Great East Japan Earthquake Recovery Special Loan Program initiated through the Japan Finance Corporation and the Shoko Chukin Bank, a private financial institution for SMEs. Under the programme, about 194,503 loans amounting to 4.38 trillion yen (approximately US\$ 53 billion) were provided in the Financial Year (FY) 2011 (METI, 2012). Grace and repayment periods were extended; interest rates were reduced and de facto zero-

interest loans were provided to MSMEs whose offices were completely destroyed. Also, 79,415 guarantees for loans worth 1.82 trillion yen (approximately US\$ 22 billion) were provided in Financial Year (FY) 2011 (METI, 2012).

To tackle the issue of 'overlapping' debt, subsidy programmes amounting to 18.4 billion yen (second fiscal 2011 supplementary budget) were initiated to defray the cost of interest on existing loans, along with a lease subsidy programme of 10 billion yen (about US\$ 93 million) to pay 10 percent of the cost of new leases for SMEs who had suffered a loss of leased equipment (FY 2011 supplementary budget, METI, 2012). Simultaneously, Industry Recovery Counselling Centres were set up through the Organization Industry Reconstruction and the Organization for Enterprise Revitalization Support in various prefectures. Their brief was to

Figure 8: Post-GEIE timeline of policies, support measures and budgetary approvals for MSME recovery



Source: Reconstruction Agency, 2013; Miyagi Prefecture, 2013; Fukushima Prefecture, 2012; MOFA 2013.

provide advice, especially on the issue of overlapping debts and loans. As of September 2012, they had responded to a total of 2,134 cases.

In the Financial Year 2011 supplementary budget, the Government provided 2,029 billion yen (approximately US\$ 24.6 billion) for unemployment benefits to employees forced to take leave due to suspension of work. It also made available 726.9 billion yen (approximately US\$ 8.8 billion) to provide employment adjustment subsidies to affected businesses.

#### Innovative group subsidy scheme

In yet another novel move, the Government provided 25.5 billion yen (approximately US\$ 240 million) in the FY2011 supplementary budget for a project aimed at providing subsidies to MSMEs that could come together as a group and conceptualize a restoration plan that would help expand local economies, create employment, form important supply chains for the national economy, and/or provide essential functions to local communities. The subsidies aimed to encourage industrial clusters, core companies or local central shopping districts. Any such plan under the Restoration and Maintenance Subsidy Project for Facilities of SME Groups or Group Subsidy Scheme would have to be certified by the prefecture. The national and prefectural government would provide 50 and 25 percent of the subsidy, respectively, for equipment and facility restoration.

By November that year, 5,779 MSM-Es,which had formed 329 SME groups had been provided support in Aomori, Iwate, Miyagi, Fukushima, Ibaraki, and Chiba(Reconstruction Agency, 2012). Additional loans on zero interest were provided and repayment periods settled at 20 years, with grace periods extending to five years.

### Measures for infrastructure rehabilitation

The Government provided subsidies amounting to 400 million yen (approximately US\$ 4.8 million) under the Financial Year 2011 supplementary budget for debris removal in arcades, and also for partial and major repairsto 114 projects. Due to the Government's initiative to remove rubble from fishing grounds, temporarily rehabilitate harbours, provide support to restore fishing boats, fishing nets, and aquafarming facilities, 43,664 facilities out of a total of 67,121 aqua-farming enterprises (65 percent) had found ways to start functioning by July 2012. By September 2012, about 528 out of 800 affected marine product processing factories had resumed business (Reconstruction Agency, 2012).

#### Fresh ideas to revitalise tourism

Immediately after the disaster hotel occupancy in Iwate, Miyagi and Fukushima fell by 56.6 percent compared with the previous year's figure. Working closely with the affected prefectures and the priv-

#### Catering to recovery: Novel project to create temporary shop facilities

The Government provided 27.4 billion yen (approximately US\$ 332 million) in the FY 2011 supplementary budget for a completely novel initiative whereby the Organization for Small and Medium Enterprises and Regional Innovation Japan (SMRJ) arranged for leased space through municipal governments for MSMEs to set up temporary stores and factories free of charge. By September-end in 2012, 2,593 entrepreneurs had resumed their businesses in 463 such facilities across six prefectures, including Miyagi, Fukushima and Aomori, (Reconstruction Agency, 2012).

ate sector, the Government launched a novel Destination Tohoku Campaign in Japan apart from hosting promotional events overseas. Looking at the entire region as one giant 'expo', it identified 28 zones around tourist spots, with 'travel navigators' guiding visitors through various locations for an enhanced understanding of the region through interaction with people.

Within seven months the ripple effect of incoming tourists was estimated at 980 billion yen (approximately US\$ 11.9 billion), with 46 billion yen (approximately US\$ 557 million) attributed to the campaign. Continuing till 2013, the campaign benefited local MSMEs, including traditional inns and hotels, retail shops, restaurants, and transport companies. In June 2012, tourist occupancy in hotels in Iwate, Miyagi and Fukushima had improved but was still 17.8 percent below the average national figure (Reconstruction Agency, 2012).

## A helping hand to MSMEs affected by the NPS accident

The Government designed a series of measures for MSMEs hit by the NPS accident. Among them were long-term, interest-free, unsecured loans to provide working capital and equipment funds for MSMEs to resume their businesses; subsidies for radiation tests at designated laboratories at the exporter's request

amounting to 700 million yen (approximately US\$ 8.4 million) in the first supplementary budget of FY 2011 to help them counter the effects of apprehensions; promotion of products from affected areas across Japan and overseas through events in major cities such as the Fukushima Local Produce Fair held in Tokyo in 2012 with 60 local shops participating (Fukushima Prefecture, 2012). This apart, MSMEs in the evacuation areas were compensated at one-half of equivalent gross profits to the tune of 2.5 million yen (approximately US\$ 30,000) from March 12 to May 31, 2011.

### Local municipalities as critical recovery agents

While providing overall direction and support, the national government promoted locally-led initiatives in the affected areas, seeing them as critical to recovery.

While all the 99 municipalities directly affected by the earthquake and/or tsunami and the 10 municipalities affected by liquefaction worked tirelessly to ensure the safety of survivors, some such as Miyako City (Iwate Prefecture) reached out to disaster-hit MSMEs exceptionally fast. On the mayor's instructions, four out of nine staff from the municipality's industry promotion unit reported to work two weeks from the disaster, contacting affected MSMEs. Once the temporary shop scheme was announced, the city

### Testing radiation with rigour : a platform called Future Meeting to conceptualize revival

The importance attached to the recovery of MSMEs was evident in the SME Agency's initiative to set up a Small Enterprises Future Unit in June 2012 with the aim of organizing a platform titled Future Meeting across Japan. The idea was to promote debate among local MSMEs, tax accountants, shopping associations, banks and community members, to review existing MSME policies and discuss strategies for their revitalization, especially in the disaster-affected region. By November 2012, the unit was ready with a draft policy document based on the points raised in meetings with youth, women entrepreneurs and various professional groups.

promptly identified land (by May) and was ready with a plan to provide 23 stores and factories by August (Seki, 2011). Miyako could respond swiftly on account of its existing, proactive efforts to establish relationships of mutual trust with local MSMEs for industrial promotion (Seki, 2011).

Unlike many who fled Soma City (Fukushima Prefecture) even without any evacuation orders, a three-member family enterprise, Ujikanro-En, stayed put and supplied tea and food items, as long as stocks lasted, to people who streamed in from affected municipalities. The shop owner even drove inland to procure supplies in order to resume his business. (Ujikanro-en, Interview, 2013).

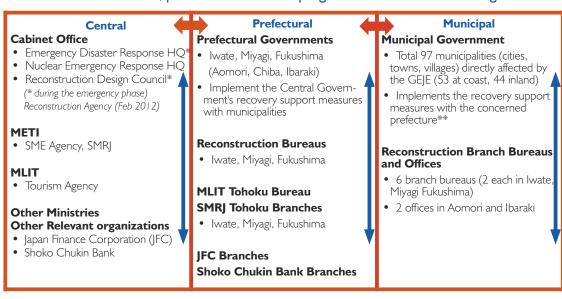
Even a big corporation like the Toyota Motor Corporation turned 'small' in its outlook in July 2012 when it announced a merger of its three subsidiaries to establish a new integrated company, Toyota Motor East Japan Inc, in Tohoku.

Its goal: To establish a local procurement centre that would entail joint manufacturing with local MSMEs to provide one of the world's most compact cars (one car requires between 30,000 and 40,000 parts), and establish the Toyota East Japan Technical Skills Academy (METI, 2012).

## Role of chambers of commerce and industry and other business networks

Of the 514 Chambers of Commerce and Industry (CCIs) across Japan, 25 are located in the three disaster-affected prefectures of Iwate, Miyagi and Fukushima. Their robust networks have played a critical role in strengthening bonds with MSMEs from the time disaster struck (Miyako,

#### Brief illustration of central, prefectural and municipal governments and relevant organization



Note: \*\*For example, the municipality needs to secure land for the Temporary Factories, Shops and Other Facilities Project, a subsidy project by the Central Government, and application is approved at the prefectural level.

\*\*\*Allows indicate coordination. There are many other entities involved in the actual recovery implementation.

#### Testing radiation with rigour

Following the NPS accident, Fukushima Prefecture began monitoring agricultural, forestry and fishery products, analyzing 19,971 food items, including vegetables, fruits, mushrooms, meat, eggs, milk and seafood. The results of the analysis, indicating the level of cesium and iodine per product, and the origin of product and testing date are publicized on a website to ensure transparency and safety. Across all municipalities in the prefecture, 492 examination units were placed in public facilities for anybody to do a simple examination of food consumed at home (Fukushima Prefecture, 2012).

Ishinomaki and Soma CCIs, Interview, 2013). For instance, despite losing one officer, Miyako CCI reached out to MSMEs early on, working out of the second and third floors of its building. It facilitated 378 MSME applications to access the Japan Finance Corporation's loan scheme out of which 334 were approved, totalling 5.6 billion yen (approximately US\$ 67.8 million) (Miyako CCI, Interview, 2013).

#### 'Idle machine' project

In an exemplary move, the Japan Chamber of Commerce and Industry used its vast network to identify idle machines in MSMEs and large enterprises across Japan for the purpose of sending them free of charge to enterprises in the disaster-affected region (Japan CCI, 2011). By December 2012, about 1,861 matches had been accomplished (Sendai CCI, 2013).

#### Role of business networks

Networks in the same industry or shopping district, in the wider business and non-business community all contributed to the effectiveness of MSME recovery.

#### When the automobile network revved up

Immediately after the disaster, heads of car companies joined hands to support car part manufacturing MSMEs hit by the disaster. Each company was assigned a particular area to look after, and organise transport pools. The car companies implicitly agreed to refrain from competing with each other to resume operations because that would put an extra burden on the MSMEs. For instance, Toyota could have procured parts from another region, but it stopped its operations for 10 days after the disaster and focused on checking the safety of business partners, providing support to them (Nikkei, 2011).

#### Shopping district network gets active

Merely three months after the disaster, members of the Miyako Suehiro Shopping District Association received a subsidy to organize a Recovery Market. Their bid to jointly revive the shopping district and the community attracted 8,000 people in two days from within the city and beyond (interview with the Miyako Suehiro Shopping District Association, 2013).

#### MSMEs helping each other

There are several instances of MSMEs extending themselves to support people and other MSMEs hit by the disaster, exemplifying their critical function in overall community rehabilitation and recovery. The 74-year-old Takamasa Fish Processing Factory in Onagawa City (Miyagi Prefecture), which lost 850 staff members to the tsunami, distributed three tonnes of fish sausage (kamaboko) at evacuation centres in the city from day one. Moreover, a new factory employing 70 people was started, with the old factory leased free of charge to local seafood processing enterprises to support the industry's recovery. Takamasa, with a staff of 175 employees, received the 77 Business Award in 2012 from the 77 Business Support Foundation.

### Emphasis on Business Continuity Plans for MSMEs

The devastating disaster of 2011 once again highlighted the fact that while preparedness was important, it was crucial to have a Business Continuity Plan (BCP) in place; a halt in operations affects not only the enterprise but also stakeholders, including partners and customers. In a welcome move, some big corporations have started preparing BCPs to support the restoration of their business partners and to keep the overall supply chain going (Kobayashi et al., 2012). According to a BCP expert from MS&AD Insurance Group, focusing on common management risks such as location of the central command and emergency communication system would be effective in ensuring continuation of business (TDB, 2011).

## Maintaining the resilience of the global supply chain

Since many MSMEs in Tohoku manufacture critical parts for vehicles, electr-

onic equipment and other high-tech products, fears of a slowdown in the global supply chain were high immediately after the disaster. However, most MSMEs in these sectors recovered in one or two weeks due to a solid support network among enterprises. Factories of larger corporations took longer due to more complicated systems, but even they recovered within three to six months (Seki, 2011), largely due to their proven network within the affected region and across different regions (Seki, 2011).





2011. Right: Inundated Miyako Suehiro Shopping District.

Left: Recovery Market came up three months after the disaster in the shopping district.

Source: Forced the enterprise to close with a total debt of 200 million yen which is approximately US\$ 2.4 million (Ishinomaki City, 2013).

#### **Group Subsidy Scheme: Pros and Cons**

Three months after the disaster, 24 fisheries-related groups from Ishinomaki applied for a group subsidy but failed. Once the CCI helped them form a single group of 210 enterprises, their funding request was accepted in 2011 end. The subsidy was used for repairing business establishments, factories, facilities and other assets. This coordinated approach is expected to boost competitiveness by promoting joint use and reducing expenses (METI, 2012). Group subsidy requires MSMEs to include a new vision of recovery that works toward strengthening the entire supply chain, contributing to overall community development. (Interview, Miyako CCI, 2013).

Many MSMEs failed to access such schemes due to ineligibility, competition, or undecided use of land in the overall urban planning, which made it difficult to formulate a group plan. Marua Abe Enterprise, a marine product processing company established in 1930 and incorporated in 2000 in Ishinomaki City was the first to go bankrupt in late 2012 in spite of having received the group subsidy. Although the new factory was almost ready, lack of funds for resuming business operations forced the enterprise to close with a total debt of 200 million yen approximately US\$ 2.4 million (Ishinomaki City, 2013).

The automobile industry was particularly hard hit by the disaster owing to its just-in-time practices and presence of suppliers throughout Japan, including Tohoku. However, following a 51.5 percent decline in April 2011 (more than the total decline in exports), production, shipment activity and exports began to pick up from May 2011, with production largely back to pre-earthquake levels four months from the disaster (METI, 2012).

#### Collaboration is the key to recovery

When a major disaster hits the entire community, helping each other out is a necessity in a highly integrated economy and also a sign of social maturity. The enumeration of various recovery measures amply demonstrates that a collaboration including governments, financial institutions, business networks and enterprises, support organizations and communities, among others, proved to be the key factor influencing effective recovery of MSMEs post-GEJE.



Fukko Yatai Mura, Kesennuma city, Miyagi prefecture.

Source: lizuka, Feb 2013

#### Mother's project

Female farmers from Abukuma District (Fukushima Prefecture), who were evacuated to Fukushima City following the NPS accident, started the Mothers' project with the support of a local university. The goal was to re-start production and sales of agricultural products such as potatoes and pumpkins and start processing agricultural products into sweets and pickles. The purpose behind it was to initiate a new community-building initiative of making healthy lunches and establishing a factory-cum-café where evacuees and local residents could gather and talk.

With a staff of 12, the Mothers' project is supported by the Ministry of Agriculture, Forestry and Fishery, Fukushima Prefecture, and the Ministry of Health, Labour and Welfare (Gender Equality Unit, 2012). The Gender Equality Unit was set up by the Reconstruction Agency to promote gender equality initiatives in the process of recovery. It documents and disseminates experiences by women entrepreneurs in the affected areas as part of its efforts.



#### Saved by the BCP

The tsunami washed away almost all the machinery, vehicles and equipment of Suzuki Kogyo Co. Ltd in Sendai City (Miyagi Prefecture). Yet the 67-strong enterprise recovered its business operations within a month, thanks to its BCP. In 2011, the company smoothly evacuated its staff from the processing plant and confirmed the safety of all employees, including those who were out of office with customers. Furthermore, the company used satellite phones to contact contractors who came the very next day to assess the extent of repairs needed. The company used the phones to help municipal authorities and customers in relief and recovery efforts. In five days the enterprise had restored the communication system at the headquarters; a week after the earthquake it had resumed industrial waste collection and recycling works. All operations were completely recovered within a month. The enterprise is now engaged in improving its BCP based on the lessons learned from the disaster (METI, 2011).

### 3.3 : Mexico: tackling long-standing issues in MSMEs recovery

### a. Policy and institutional context for recovery support to MSMEs

It is a paradox similar to many a developing countries. Recognizing that a comprehensive and integrated approach is needed to manage disaster response and recovery, Mexico has made arduous efforts to put in place a federal DRR structure. Consequently, there has been a reduction in the average number of deaths in disasters annually. However, the Civil Protection Acts at the national, state or municipal level which lay down regulations regarding risk reduction are silent when it comes to conceiving of DRR specifically with regard to the MSME sector; so too laws such as the Law for the Development and Competitiveness of MSMEs.

The support programmes that do exist are largely expedient in nature and less likely to foster sustained growth or contribute to the resilience of enterprises. While the Sub-Ministry for Micro, Small and Medium Enterprises (Subsecretaría para la Micro, Pequeña y MedianaEmpresa-/SPyMe) within the Ministry of Economy has developed several programmes to increase the competitiveness of MSMEs, none have been developed with DRR and disaster prevention in mind.

Once the Ministry of Interior (Secretaria de Gobernacion/SEGOB) declares a natural disaster, the Natural Disaster Fund (Fondo de Desastres Naturales/FONDE-N) is the first national funding agency to swiftly respond with emergency funds for humanitarian aid and public infrastructure when the situation is beyond a state's financial capacity or a municipality's capability. While not directly aimed at economic recovery, these actions have an indirect bearing on the productive activities of MSMEs.

Direct assistance for disaster-affected MSMEs comes from the Ministry of Economy which channels support to them via the MSME Fund and intermediate organizations. Once damage assessments are carried out and eligibility is ascertained, three types of funding are made available to the enterprises: a nonrefundable subsidy through the Direct Support Scheme (Apoyo Directo [Subsidio]), a credit scheme, both delivered via a private company (intermedio) authorized by the Ministry of Economy, and a Guarantee Fund or loan issued through a bank.

As mentioned earlier, an enterprise must be formally registered with SAT to be eligible for any kind of financial support. Since the objective is to increase the number of formalized MSMEs, if an unregistered enterprise approaches the MSME Fund for aid following a disaster, that support is generally provided on the condition that the business agrees to formalize straight away, thereby agreeing to all future tax

#### Establishing credentials for aid

To access official aid an MSME is required to fulfil certain criteria. It must be a registered enterprise operating in the industrial, agro-industrial, commercial or service sectors to make a formal request for assistance. Further it must prove that the space of professional operations is exclusively that of the business and not shared in any way. The enterprise must be located in an area that has been formally declared an emergency or disaster zone. Finally, the business must be able to establish its credentials as a functional enterprise before the disaster and also be able to show specific disaster effects.

requirements. Another direct means of support for disaster-hit MSMEs comes from the Permanent Natural Disaster Support Programme of Nafinsa.

## b. Measures taken by the tabasco government

#### Enabling the formalization of MSMEs

Since it is necessary for an MSME to be formally registered with the Ministry of Finance Tax Administration Service to access government aid packages, as soon as the state of Tabasco issued a formal declaration of emergency following the floods on 13 November 2007, it set up MSME registration centres around the capital Villahermosa and across the state for unregistered enterprises to register and agree to abide by future tax regulations. This concession was made in acknowledgement of the key role played by MSMEs in the reactivation of the local economy. The Yucatan Peninsula states also sent personnel to assist in this process which went on till December 31. In many instances where buildings disappeared in the severe flooding, officials had to take the word of an MSME owner or a neighbour to establish the credentials of the enterprise, a fact which underlines the extremely precarious design of many of these constructions.

#### Financial aid for MSMEs

Once the assessments had been completed in 2007, the lists of confirmed MSMEs were sent to the Tabasco State Fund (FondoEstatal Tabasco). Of the 25,210 MSMEs seeking aid, 17,748 enterprises received support. Each enterprise received a non-refundable subsidy of MXN\$ 10,000 (approximately US\$ 750.00) under the Direct Support Scheme, delivered via a

private company (intermedio) authorized by the Ministry of Economy. Vouchers worth around US\$ 1,100 each were issued by the Ministry for Work and Social Provision (Secretaría del Trabajo y Prevision Social) to distributors affiliated with the Development and Guarantee Fund for Workers' Consumption (Fondo de Fomento y Garantía para el Consumo de losTrabajadores). The Ministry of Employment (Secretaria de Trabajo) distributed cheques worth US\$ 170.00 each to every worker in every disaster-affected MSME. These actions by other ministries suggest flexibility on their part to provide financial aid depending on the circumstances and/or severity of each disaster event (SEGOB, 2012). From 2007 to 2012, about 66,596 MSMEs in 24 states received financial support from institutional mechanisms to the tune of approximately US\$ 257 million. In this period, Tabasco suffered the most extensive damage to its MSME sector, with 37,923 MSMEs receiving financial support totalling US\$ 27 million.

### Banking on a permanent natural disaster support programme

Under its Permanent Natural Disaster Support Programme, Nafinsa provided credit worth US\$ 4,000 to each MSME, repayable over 10 years with an interest rate of 5 percent for the first two years and 11 percent thereafter. It also made available a total of US\$ 15 million in loans to 77 percent of the MSMEs that had formally applied for loans (CENAPRED, 2007, p.390).

### Efforts to create a favourable environment for recovery

The funds generated by the Natural Disaster Fund and the MSME Fund, and

<sup>&</sup>lt;sup>13</sup>This fast response concurs with that of SPYME personnel in an interview conducted during the field work process: on average, 10 days from the disaster to the first requests for support to the first payment (Diana Corona Meneses, Director of SYPME, personal communication, January 17, 2013).

#### Mandate for aid

In the year 2000, Nafinsa's mandate was expanded to include the use of technology to facilitate loans to micro and small enterprises and complementing its lending activities by providing greater training and technical assistance to MSMEs. One of Nafinsa's chief initiatives was to develop an eplatform for reverse factoring through the Productive Chains (Cadenas Productivas) programme by linking small suppliers with big buyers which would help small suppliers to access working capital (World Bank, 2005).

In 2003, Nafinsa initiated its Permanent Natural Disaster Support Programme, in coordination with the Ministry of Economy, state governments and 11 of the largest private banks in Mexico, allowing MSMEs to choose whichever bank they preferred. As of now the financial institution runs two support programmes under the programme, both of which charge a 12 percent interest rate. One programme provides support of up to US\$ 150,000, payable over a period of three years in the event of physical damage. The other programme provides support of up to US\$ 150,000 in the event of economic damage resulting from the interruption of economic activity or loss of income/sales, payable over three years for working capital, five years for machinery or equipment and 10 years for property refurbishment. Between 2003 and 2010, Nafinsa provided emergency financial support to 15,060 MSMEs in various states in the course of nine different events, including six hurricanes and one earthquake (Nafinsa, 2010).

also by the international community, enabled the Tabasco economy to recover relatively quickly, especially the services and construction sectors, and the hotel industry. The latter two actually showed growth in the four months following the disaster; construction (as is often the case) received a boost due to the need for urgent repairs and reconstruction, while Villaher-mosa's hotels did brisk business owing to the influx of national and international stakeholders in the city (CENAPRED, 2007, p.392).

Unemployment, too, did not increase, mainly because of local actions. Business owners generally held to the principle of retaining their existing workforce wherever possible. The staff was put to the task of clearing the premises; small and medium businesses opened up within a week or two of the disaster and micro-businesses within a few days. (CENAPRED, 2007, p.391).

#### Issue of accountability

Costs for the Natural Disaster Fund in Tabasco totalled US\$ 113 million, with US\$ 30 million in transport infrastructure via the Ministry of Transport and Communications (Secretaría de Transporte y Comunicaciones) and US\$ 83 million in water-related infrastructure via the National Water Commission (Comisión Nacional del Agua). However, it has been reported that while the Tabasco state government received around US\$ 325 million from the Natural Disaster Fund, it could account for only US\$ 69 million, with both federal and state authorities denying any knowledge of where the remaining money went (Arias Rodriguez, 2009, p.22). This lack of accountability within all levels of government is perceived by the Mexican people to be a significant problem, highlighting the need for mechanisms that would allow them to track the use of public funds.

### f. Measures taken by the government in Chiapas

#### MSME fund steps in

Following the two floods in Chiapas in 2010, a total of 589 MSMEs required emergency support from the MSME Fund. After the August floods all the 129 MSMEs in the state capital of Tuxtla Gutierrez formally applied for financial assistance from the MSME Fund and qualified for the non-refundable financial support option, with the MSME Fund disbursing a total of US\$ 120,000.

Similarly, following the floods in northern Chiapas in September 2010, about 284 MSMEs from the Yajalon municipality applied to the MSME Fund, which paid out a total of US\$ 184,000. The funds were largely used to provide working capital and carrying out urgent repair works. Among them were 32 businesses bordering the river Yajalon, immensely vulnerable to disasters on account of their location. The two disaster events in Tuxtla Gutierrez and Yajalón cost the MSME Fund a total of US\$ 304,000 in emergency support. According

to a Ministry of Economy report these funds safeguarded the employment positions of 673 workers (431 men and 242 women) (Ministry of Economy, 2012).

Further, the MSME Fund provided additional support to help MSMEs maintain their competitiveness. Under the National Micro-business Programme (Programa Nacional de Microempresas), 5 percent of the affected MSMEs received support, including group consultancy on issues of productivity and administration. Under the Micro-business Training and Consultancy Programme (Programa de Capacitación y Consultoria a Microempresas), made financially viable through state government grants, 25 affected MSMEs in Tuxtla Gutierrez and Yajalon received training in methods to enhance their competitiveness. Under the Sistema Nacional de Garantias, initiated via Nafinsa and La Banca Privada, one MSME in each of the affected areas received a one-time grant (Ministry of Economy, 2012).

Table 8: Municipalities affected in chiapas in august and september 2010 and MSME losses (in US\$)

Municipality	MSMEs Affected	Direct Losses US\$	Indirect Losses US\$	Total \$US
Tuxtla Gutierrez	126	No data available	No data available	No data available
Yajalon	284	188,500	60,000	248,500
Tila	44			
Tumbalá	66	46,000	14,000	60,000
Salto de Agua	47	74,000	22,000	96,000
Sitalá	12	76,000	23,000	99,000
Chilón	10	18,000	5,000	23,000
Total	589	402,500	124,000	526,500

Source: Adapted from CENAPRED, 2012, p.224; Ministry of Economy, 2012.

### Cooperative recovery experience in the Chiapas coffee sector

In Chiapas, 83 out of 122 municipalities have coffee plantations providing employment to more than 183,000 producers, with the sector constituting about 50 percent of the economically active population in rural areas (FIECH, 2013; AMECAFE, 2010). The Sierra Madre region in Chiapas is widely acknowledged for its production of organic coffee through cooperatives such as the Indige-nous Ecological Federation of Chiapas (Federación Indígena Ecológica de Chia-pas/FIECH).

Following Hurricane Stan in 2005 and Tropical Storm Matthew in 2010, coffee production in the state suffered losses of 80 percent and 30 percent respectively. Denied financial support by government and private sources, FIECH – along with many other cooperatives – received a grant of US\$ 40,000 from Oxfam Mexico. These funds were used to install greenhouses, along with 500,000 nursery plants, and also, with the production of bio-fertilizers, initiate alternate soil recovery methodologies.

The experience of the cooperatives is that government support programmes can come with a troublesome rider. For instance, after the 2005 disaster, government aid programmes like Tropico Humedo were offered to coffee cooperatives on the condition that they use only the low standard robusto seed when most of them, including FIECH, produce the higher quality species that produces Arabic coffee (organic Arabic comprises 90 percent of the coffee grown in Chiapas). According to FIECH assessor Emilio Osorio, the insistence on robusto favoured large monopolies which wanted to replicate the practices prevalent in other, larger coffee growing states of Veracruz, Puebla and Guerrero (personal communication, 25 January 2013).



Precarious
nature of
many of
the
MSMEs
in Yajalon.
Photograph
: Adelfo
Santis de
la Torre

#### Pros and cons of recovery - the Yajalon experience

A field visit to Yajalon on 6 February 2013 to gauge the effect of support measures to MSMEs affected by the 2010 disaster revealed unsettling facts:

- Most of the MSMEs continued to remain in the same risk zone as during the 2010 disaster, duly permitted by the municipality. The high-risk zone is the urban and commercial centre of Yajalón, hence to relocate elsewhere would imply losses.
- Respondents registered with SAT, who had received the maximum subsidy of US\$ 2,000 after the disaster, stated that it only covered clear-up costs with the result that they had to revive their business on their own.
- Of all the businesses installed in the hazardous area, 70 percent remained informal.
- Only 40 percent of the official mitigation work near the river bank had been completed. The greatest concern of respondents was the possibility of another disaster occurring due to poorly constructed public works such as bridges and the tubular water system.
- Decentralization has meant that more power has filtered down to the municipal level. However, in the absence of adequate funding for capacity building programmes to train officials in aspects of risk identification and DRR, these situations are likely to continue.

However, with Oxfam Mexico's assistance, FIECH has created its own internal research wing focusing exclusively on tracking, analyzing and managing climate change and DRR, with members participating in forums that debate models to provide increased momentum for the independent coffee sector. The cooperative has not only been able to influence public policy regarding Trópico Húmedo at the national and state level; it has successfully promoted the recovery of soils and plants best suited to the region through a use of natural fertilizers and technical support emphasizing local and indigenous knowledge. Also, it has successfully developed international marketing strategies.

Since 2012, vulnerability and risk analysis specific to the business sector have been carried out through select methodologies. These are aimed at providing the ministries, and subsequently the MSMEs, fundamental information about risk levels within each individual investment portfolio in terms of business development, location in potentially hazardous locations (or otherwise) and recovery. The key tool being utilized is a Risk Data Sheet (Ficha de Analisis de Riesgos) that identifies and analyses criteria on risk perception for a particular project from the perspective of Ministry of Economy personnel, ranging from generic vulnerabilities such as physical, socio-economic and political to specific vulnerabilities relating to the

business sector. Although still in its early stages, the Risk Data Sheet has identified the following vulnerabilities within the Chiapas business sector:

- Poor knowledge and access regarding marketing channels;
- Perceived complexity of management and administration procedures;
- Poor communication infrastructure;
- High or unfair competition;
- Unavailability of trained human resources;
- Little or no access to financing;
- Little or no access to services;
- Low job security; and
- Low quality training options.

In the case of disasters in Tabasco and Chiapas, while the federal and state institutions delivered financial support to the affected regions at a relatively fast pace, their efforts were characterized by a lack of transparency regarding their inputs, with the result that their impact and subsequent recovery evaluations are not easy to establish. In both affected regions, group and individual actions on the part of the affected MSMEs aided recovery processes. Inconsistencies regarding municipal adaptation of federal laws are liable to increase vulnerability, not reduce it and therefore are cause for concern. Importantly, the lack of a culture of private sector DRR initiatives in Mexico has prevented good practices from entering the mainstream.

#### Planning recovery and prevention geared towards MSMEs

Since the 2010 disaster, Chiapas' Ministry of Economy and UNDP have worked closely to develop a Manual for Disaster Risk Recovery and Prevention in Development Processes (Manual para la Prevención de Riesgos de DesastresenProcesos de Recuperación y Desarrollo) which analyses risk factors and vulnerabilities while proposing DRR recommendations throughout different sectors, including the MSME sector. The manual is the outcome of a pilot programme involving the Ministry of Economy (focusing on business and enterprise), the Ministry of Agriculture (focusing on agricultural systems) and the Ministry of Infrastructure (focusing on public works). The programme also relies on close working partnerships with the state civil protection unit that comprises the DRR institutional structure at the state level.



### 3.4: India: role of the MSME sector as a driver of recovery

### a. Policy and institutional context for recovery support to MSMEs

MSMEs are often lauded for their innovativeness and growth potential, but the fact is that their concerns are not acknowledged in any DRR plans. While the Disaster Management Act, 2005, and the National Disaster Management Policy, 2009, paved the way for setting up institutions at the national, state and district levels, demonstrating appreciable progress in various areas of disaster risk management, the new set-up is yet to acknowledge and address risk and recovery issues of MSMEs. The same is true for the Disaster Management Act of Odisha and the State Disaster Manage-ment Policy, 2005. Further, both state and national government departments for MSMEs are not included as key agencies in institutional frameworks for disaster management.

The existing system of financing relief expenditure revolves around the National Disaster Response Fund and the State Disaster Response Fund at the central and state level both of which target immediate relief measures. For the financial recovery, Additional Central Assistance was extended to states in the wake of the 2001

Gujarat earthquake, the 2004 Indian Ocean tsunami and the 2008 Kosi floods. However, it is important to remember that any assistance that MSMEs receive is largely under the rubric of general livelihood support measures and does not address their specific recovery needs..

## b. Measures taken by the state government

Following the 2011 Odisha floods, a massive relief and recovery effort was initiated by the state government by way of procuring financial assistance from the Central government and various Central government schemes, and the National Disaster Response Fund. However, such funds are utilised in immediate relief measures and not meant for long-term recovery. The assessment of the disaster impact and recovery during the Odisha Floods also did not take into purview the impact of disasters on MSMEs.

Following the disaster, MSMEs in the surveyed villages study were offered small loans and credits by micro-finance institutions to purchase goods for their households and build assets to revive their income. A few also used these loans to

#### MSME owners ask for training in disaster preparedness

The District Collector of Puri pointed out gaps between the demands of local MSMEs and the actual support provided by various authorities. Discussions with the villagers revealed that their requests to the government for better infrastructure, more training in disaster preparedness, improved sanitation, better water quality, assistance for the disabled, public toilets and more health facilities had not been taken note of. This calls for the augmentation of both the capacities and resources of authorities, especially at the local level. There is a need to enhance coordination and improve supply chains and logistics amongst disaster responders so that communities can promptly receive the resources they require so desperately

invest in DRR measures such as raising the plinth level of their vegetable beds.

#### c. MSMEs as agents of self-recovery

The one aspect of the recovery process that needs to be highlighted is the role of MSMEs as an integral and pivotal component of the local economy and community in times of dire need. Their range of abilities and actions draw attention to the potential they hold as bulwarks of enterprise and resilience capable of holding the community together.

#### d. Sustaining the local economy

As an integral part of rural (and urban) communities and their local markets, MSMEs played a key role in all the four flood-affected villages that were surveyed. They provided daily goods and services and stimulated the local economy by offering an alternative source of livelihood while reducing dependence on agricultural livelihoods. Equally, they supported economic recovery in the villages by participating in efforts to reopen/repair roads and restore the local environment and markets so as to be able to resume their activities.

e. A crucial link to community

Most MSMEs are an excellent entry to community-based processes after a disaster as well as a direct link to the domestic household economy. Following the floods in Odisha, the wide network of MSMEs was used for activities such as passing on relief and recovery information or calling meetings; utilising their skills in reconstruction activities, obtaining credit from social contacts, and re-enrolling children in schools.

Their social and economic networks also give them access to information and knowledge that can be used to design recovery operations in keeping with their needs and those of the community. For the benefit of the community, the same information can be used to keep track of the work being done. To facilitate greater community participation in recovery, the authorities and Civil Society Organizations took recourse to the links of MSMEs with their customers and suppliers. MSMEs helped collect information about the community, acted as a point of coordination, stored material and stocked relief items, offered extra hands in recovery activities, helped make loss estimates, offered advice on how to revive livelihoods and provided information to visiting relief workers about providing small loans in favour of one or other

carpenters can be used to make disaster resilient shelters. They can not only earn livelihoods but contribute to making disaster resilient villages. When my skills are used I benefit; when they are not used I become a victim waiting for relief."

"The skills of

TrinalMaharana, Carpenter, Balapur Village, Puri District

#### Failure of perception

Large DRR projects, such as coastal cyclone shelters, too, have overlooked the role MSMEs can play in constructing, maintaining and running them, between and during disasters. At present none of the DRR activities being run by the Odisha State Disaster Management Authority, such as the National Cyclone Risk Mitigation Project, the Government of India-UNDP DRR programme and the Urban Earthquake Vulnerability Reduction Programme, or the three DRR projects being implemented in Puri District, have utilized the capacities of MSMEs. This is notwithstanding their provisions for community involvement.

#### f. Providing crucial knowledge support in recovery

Owners of enterprises residing in the villages for long are well aware of the risks, the vulnerabilities of associates and customers, and the ways to reduce risks. For example, they can give an estimate of the quantum of crops that would be lost in the event of severe floods. Moreover, they serve as local knowledge repositories for new MSMEs and community members in the event of a disaster.

#### g. Opportunities for integration of marginal groups in recovery processes

The survey showed that MSMEs offer opportunities to marginalized groups, including women, unskilled youth, physically challenged individuals, migrants, tribal communities and minorities to restart their lives after a disaster, achieve a degree of independence and reduce their poverty levels. In fact, during discussions, groups of people identified MSMEs as a possible first to be included in the disaster recovery processes.

Women particularly stated that they found it easy to join a small business or start a small business that could be run from home. Home-based businesses allowed them to manage both their homes and work, have flexible work hours, and extend their caring and personalized services beyond the household to customers. However, they

were hit harder by the floods as they had to take up additional work to support their families and business. Self-Help Groups were a critical means of providing training, support and resources, and collectivizing women to establish their own group businesses.

#### h. Critical absence of the corporate sector in MSMEs' recovery

In stark contrast to Japan and similarly to Mexico, the corporate sector in India is largely absent from efforts to promote the post-disaster recovery of MSMEs. While the corporate sector and its networks such as Confederation of Indian Industry and the Federation of Indian Chambers of Commerce and Industry have a long history of responding to disasters and providing relief and recovery assistance to the disaster-affected, the involvement of corporate entities in DRR activities is not very significant. Of late the National Disaster Management Authority has urged the corporate sector, as part of its corporate social responsibility, to come forward not only for relief and rehabilitation efforts but also in mitigation and preparedness, by collaborating in efforts to evolve guidelines for Business Continuity Man-agement<sup>14</sup> (Reddy 2012: 2). This is an opportunity to create linkages with MSMEs that can be considerably beneficial for the economy and the overall community in the long run.

There are other areas also needing atten-

#### In business, collectively

"The Self-Help Group has supported the entire group financially and psychologically in the worst of times. Floods wash away assets. Assets take away income. Without income families have limited food; education becomes a burden. A small illness becomes a big threat".

Renubal Maharana, Business Owner for Stone and Soap Carved Items, Puri District

<sup>14</sup>Shri M Shashidhar Reddy, Vice Chairman, National Disaster Management Authority (NDMA), 2012, in a press release titled 'Industries draw their subsistence from community and must contribute to community disaster preparedness', New Delhi

tion. The field survey brought to light the fact that the Puri District Collector had met MSME owners as part of the District Disaster Management Plan (DDMP) revision process. At the meeting the business owners stressed the need for a designated authority they could access with regard to their losses and compensation. It was their view that public and civil society processes should include these considerations in their project planning.

The field survey underlined the crucial fact

that economic policies by themselves do not enable fast recovery, direct and significant investments in enhancing MSME capabilities are necessary. These investments must be customized to the local context and the specific needs of individual businesses. Further, education, nutrition, public health and skill-building go a long way in creating strong grounds for an accelerated recovery of MSMEs.

### 3.5: Conclusions

It is well understood by now that the postdisaster recovery of MSMEs in Japan, Mexico and India have followed different trajectories owing to various factors vis-àvis socio-economic fabric of the country, preparedness level of the communities, policy support and the mainstreaming of the DRR in the development planning process among others.

While in Japan, the integration of MSMEs into the economy and a strong DRR culture created strong fundamentals for recovery, aided by a spirit of collaboration that united all levels of government, the private sector, business networks, MSMEs themselves, and the community.

In Mexico, the recovery of a sector less than integrated into the economy was hindered due to an overall lack of awarness of DRR concerns of MSMEs among two significant actors, namely the state and local governments, and the private sector. However, the instinct for self-recovery among MSMEs in the poor state of Chiapas, and the government's attempt to work on the inclusion of MSME concerns in the recovery frame-work demonstrated positive strands in the narrative of MSME recovery.

This narrative is reflected in the India study as well in a more acute manner. Invisible to the government and the private sector, the rural micro entrepreneurs of Odisha emerged as inspiring figures in their context, sustaining the local economy and rural community even as they struggled to survive and revive. The essence is that recovery is effective when the MSMEs are integrated into the mainstream economy, necessitating collaboration among all the key stakeholders.



## **Chapter 4**

Ensuring effective recovery: challenges, lessons and recommendations

Japan: issues affecting MSMEs' recovery

Mexico: issues affecting MSMEs' recovery

India: issues affecting MSMEs' recovery

MSMEs' recovery: key lessons

Recommendations

Conclusions

### Chapter 4

# 4.1: Ensuring effective recovery: challenges, lessons and recommendations

Each of the case studies highlights on the various factors posing a challenge to an effective post-disaster recovery of MSMEs and the lessons learnt from the experience.

In Japan, a couple of factors affecting the recovery of MSMEs were unique to their context, such as the trend of an ageing population and depopulation in the cities hit by the GEJE and the efforts required to tackle the fallout of the NPS accident in the form of apprehensions about radiation levels. Besides, the need to keep a long-term view of recovery remains one of the biggest challenges. The significant learning was that a prompt and muIti-pronged response, aided by coordination among business networks,is crucial for the revival of MSMEs, which can be effective only when all stakeholders work in unison and when there is maximum information sharing.

In Mexico, possibly the biggest barrier to MSMEs'recovery is the lack of any well-thought out policies and strategies to address the persisting vulnerability of micro enterprises which comprise the majority of MSMEs in the country, many of them home-based enterprises run by women. When municipal governments extend financial support to enterprises that continue to be in high-risk areas, they compound the problem. The lack of attention paid to business risk management plans for MSMEs, too, exacerbates their vulnerability. The case study highlights some valuable lessons that sustained

measures to formalize the informal sector are necessary to turn around MSMEs. Sound business risk management plans and accountability for recovery plans are crucial to recovery.

In India, the MSMEs concerns are not addressed in the country's policy and institutional context, and recovery framework. This lack of policy support slows down the post-disaster recovery of a sector that provided the maximum employment in rural India after agriculture. There is an inability to build upon and around the positives of micro enterprises by investing in their capacities to address risk concerns; the provision of inadequate support, that too under general livelihood measures, as well as lack of innovative business risk management packages are problems that need to be looked at urgently. The most important lesson that the India case study provides is that the growth potential of MSMEs will be achieved when the definition of growth includes DRR aspects essential for the recovery of MSMEs in India.

### 4.2 : Japan: issues affecting MSME recovery

### a. Challenges faced during the recovery process

### Recovery planning and implementation

For Japan, one of the most disaster prepared nations in the world, the devastation caused by the GEJE has led to an intense review of ideal urban planning models. However, a long-drawn process of finalizing the recovery plan can be unsettling. For instance, if Kesennuma is not ready with its recovery plan by the time the lease of the temporary FukkoYatai Mura Recovery Market draws to an end, MSMEs operating from there would be uncertain about their next step.

Secondly, the recovery plan, rather than focusing on returning to pre-disaster levels, must develop core facilities to meet the growth needs of the city five or 10 years ahead. Hence, the Miyako Suehiro Shopping District Association, which play-ed a critical role in relief and recovery, is actively taking part in the discussions on the city's recovery plan (MiyakoSuehiro Shopping District Association, Interview, 2013).

Impact of an ageing population and depopulation on MSMEs' recovery

Many of the disaster-affected cities have

been facing the problems of depopulation and an aging population. During discussions organized by the SME Agency in Tohoku to promote MSMEs in the region<sup>15</sup>, enterprises have expressed the need to retain youth in affected communities by creating an enabling environment for them to start local enterprise: by providing training for youth to inherit the skills of local industries and establishing attractive shopping centre districts to create jobs.

Secondly, except for Miyagi Prefecture's capital Sendai, which is experiencing a population increase, most other cities have been facing a steady population decline even prior to the disaster. A common reason for business closure after the GEJE is that in the absence of a successor ageing owners find it difficult to re-invest in the business, since repayment would take 10-15 years. It is not easy for people over 60 years old to restart from scratch (Miyako Hirosue Shopping District Association, interview, 2013), more so for MSMEs that were experiencing a decline even prior to the disaster (Miyako City, Interview, 2013). Many CCIs and municipality officials reiterated that MSME recovery and employment opportunities are crucial for the recovery of affected communities.

#### Hoping for a future

In a Future Meeting in Mishima City (Fukushima Prefecture) a carpenter put it succinctly: "Carpenters are aging and it is imperative to hand the traditional techniques to the next generation. Plasterers also need to transfer their techniques. In order to develop these skills in young people, it is necessary for them to live and learn in the town. But should we invite people first or re-establish the town first? Either way, it is difficult."

<sup>&</sup>lt;sup>15</sup>Source: 'Small enterprises' Future Meetings: Small enterprises changing Japan', SME Agency, METI, www.chusho.meti.jp/miraikaigi/index.html (Japanese)

### Countering the fallout of the Fukushima Dai-ichi NPS accident

A common refrain among all the people interviewed for this study was that countering the apprehensions of radiation levels and food safety comprise one of the biggest challenges to recovery. Despite rigorous inspections of food/non-food items and physical locations and the sale of safe goods far below the permitted national standard (which is stricter than the international standard), food industries in the affected prefectures continue to face the adverse impact of fears of radiation. Therefore, it is important to create an awareness of Japan's stricter standards of permitted radio nuclide levels in foodstuffs to facilitate proper actions on trade (Ishinomaki CCI, Interview, 2013).

## Creating a favorable environment for female staff

A participant at a Future Meeting in Mito City raised the issue of providing a work environment conducive to female MSME workers by pointing out that most women working in traditional inns leave after childbirth due to insufficient or absent nursery facilities<sup>16</sup>. These needs, along with others, are reflected in the SME Agency's promotion strategy.

#### b. Recovery effort: key lessons

In the Government of Japan's 'Basic Guidelines for Reconstruction in Response to the Great East Japan Earthquake' published in July 2011, the first five years of the 10-year recovery time frame are seen as a "concentrated reconstruction period" (Reconstruction Head-quarters, 2011). Although it is early days yet, the post-GEJE recovery experiences of affected MSMEs highlight many useful lessons.

### Swift and multi-pronged response is critical for MSMEs recovery

Support measures were launched immediately after the disaster, ranging from loans, guarantees, subsidies, temporary facilities, overlapping debt schemes, unemployment benefits and consultations.

### Business network and coordination is vital

Within days of the disaster CCIs in the affected region started coordinating emergency response with the municipalities, gathering and disseminating important information and coordinating applications for various financial measures, an effort in which CCIs from other regions also pitched in. Local shopping districts, automobile industries and other groups of enterprises used their business networks fully to support each other, demonstrating the importance of such network in MSME recovery. The government, too, has been promoting linkages among enterprises across regions for effective recovery.

### The advantages of multilateral collaboration

Collaboration among various actors is the key to supporting MSMEs. Government support measures are designed to be implemented through prefectural and municipal governments and relevant organizations, in collaboration with MSMEs, communities and various networks. Smooth information sharing and close collaboration are thus indispensable in implementation.

#### Shortcomings in support measures

Despite various measures implemented at

<sup>&</sup>lt;sup>16</sup>Minutes of a Future Meeting in the city of Mito (Ibaraki), 15 April 2012.

various levels of government and relevant institutions, many MSMEs found they were not eligible under subsidy programmes. Information sharing has not been extensive enough to reach all the MSMEs. The complex and time-consuming process of recovery planning creates uncertainties about business resumption by MSMEs, while depopulation and an ageing population pose a serious challenge to the overall recovery of MSMEs.

#### c. Recommendations

Based on this case study, the following recommendations are suggested:

- Prompt support should be provided to reduce the possibility of bankruptcy and facilitate effective recovery, since a time lag exacerbates the damage suffered by MSMEs.
- A system should be devised whereby business networks can directly receive the necessary resources and powers from the government or relevant entity so as to be able to contribute to the recovery process more swiftly and effectively.
- There should be efforts to streamline information sharing to ensure close collaboration on a multilateral level for a smooth implementation of MSME recovery efforts.
- A case study should be undertaken at a later period in the 10-year time frame to reassess the issues raised in this report, such as the state of MSMEs that resumed business, the overall recovery of the MSME sector in Tohoku,

- progress, implementation and impact of the overall recovery plans, development of BCPs, and state of preparedness among MSMEs.
- The MSME recovery efforts should be designed in a way that they incorporate long-term projections of growth and competitiveness in the overall global scenario.

### 4.4 : Mexico: issues affecting MSMEs' recovery

## a. Challenges faced during the recovery process

#### A continuing vulnerability

One of the serious challenges to effective recovery is the underlying vulnerability of micro firms, which account for the majority of economic enterprises in the country and which are vital for household income. In fact, a large number of them are informal home-based firms, often run by women and beyond the pale of institutional support. A disaster can lead to a simultaneous loss of home and business. Yet, there are few strategies to deal with their post-disaster travails.

The Ministry of Economy has shown a certain flexibility by offering unregistered MSMEs the opportunity to register following a disaster in order to access financial support. However by the Ministry's own admission, these concessions are made in a random manner.

#### Promoting informality by noncompliance of DRR norms

The study showed that while the processes of credit support by official agencies for affected MSMEs were initiated relatively quickly, many MSMEs such as in Yajalon received aid from the local municipal authorities despite occupying high risk zones, going against DRR norms. There is a need to amend existing federal regulations, applying conditions to the granting of loans, subsidies or opening of new MSMEs and ensuring compliance through state and municipal directives.

### Issue of transparency in recovery evaluation

While general figures were available regarding the emergency financial support delivered by the Ministry of Economy via the MSME Fund in Tabasco and Chiapas, it was difficult to come by concrete figures of the amount spent within a specific disaster zone and within specific firms. Hence it was difficult to assess the extent of recovery among micro firms. Even a small sample of micro firm owners interviewed in Yajalón revealed that the support of US\$ 2,000 was not sufficient for a business to get back on its feet.

While full inventories of humanitarian aid spending in response efforts are freely available in Mexico from government sources, efforts at evaluation of recovery are not marked by a similar transparency on the part of the ministry. There is a need for allowing all stakeholders to contribute to the debate so that MSME recovery efforts can be strengthened.

## Low priority accorded to business risk management

Another serious issue affecting the recovery of the MSME sector is the low level of acceptance of risk management schemes in the country. A 2011 international survey of 12,000 employers across 85 countries reported that MSMEs in Mexico are less likely than the rest of the world to have a disaster recovery strategy in place<sup>17</sup> (51 percent as opposed to 45 percent), with the main reason being that it perceived a high expenditure (Pymempresario, 2013). For MSMEs and low-level entrepreneurs in

<sup>&</sup>lt;sup>17</sup>The most common risk management schemes are generally: Business Continuity Planning [BCP]; Business Continuity Management [BCM]; and Enterprise Risk Management [ERM]) (Risk Mexico, 2013).

Mexico, the task would be more difficult, for information is not likely to be easily obtainable to these small firms and specialist consultant fees would be beyond their capacity.

Regarding the funding mechanisms deployed in Tuxtla Gutierrez and Yajalón, the failure to provide innovative, low-cost or subsidized Business Continuity Planning [BCP]; Business Continuity Management [BCM]; and Enterprise Risk Management [ERM]) packages along with group consultancy in productivity and administration to affected MSMEs can be termed a missed opportunity.

### Lack of MSMEs' presence in DRR debate

While MSMEs make up 99 percent of all businesses in the country, they do not figure in the DRR debate in any manner. This is amply borne out by the fact that the study had very little data to go by: There were no exact figures of the number of MSMEs that obtained subsidies in Tabasco and Chiapas, no record of where the funds were spent or what their impact was, and not enough results for an evaluation of long-term recovery.

Added to the problem of nontransparency was the lack of accountability for decisions such as allowing MSMEs to remain in areas that would only increase their vulnerability. Finally, the case study revealed a lack of efficiency in recovery efforts seeing that mitigation projects were left half-way and remained incomplete.

#### b. Recovery effort: Key lessons

There are certain lessons to be learnt from this case study of the post-disaster recovery efforts concerning MSMEs in Tabasco and Chiapas.

### Long-term, calibrated measures essential to formalize informal sector

Official gestures such as allowing informal MSMEs to register after a disaster so that they can access government's financial support on the condition that they abide by tax regulations, is well meaning but such actions are not enough. Calibrated measures to incentivize the informal MSME sector into registration for long-term formal benefits and vulnerability reduction are the need of the hour for they will go a long way in benefiting the economy and the community.

## Innovative measures of business risk management essential for resilience

The initiative of the MSME Fund to include group consultancy on issues of productivity and administration to affected MSMEs in Tabasco along with financial support under the National Microbusiness Programme or the Microbusiness Training and Consultancy Programme was a positive step. It is important to strengthen such initiatives by simultaneously providing low-cost BCP/BCM/ERM packages to MSMEs so as to institutionalize the practice of risk management in a sector that is growing in importance day by day.

# Development and institution alization of policy to prioritize business risk management at the federal level

As a consequence of the enervating impact of disasters on enterprises, Chiapas has initiated a collaborative pilot project with UNDP to plot the level of risks within each individual investment portfolio in terms of development, recovery and subsequent risk reduction. This will go a long way in reducing the vulnerability of MSMEs.

## Transparency and accountability essential for recovery and resilience

The fact that the Tabasco state government could account for only US\$ 69 million of the US\$ 325 million received from the Natural Disaster Fund points to a lack of transparency and accountability of the state machinery. There is a need for mechanisms whereby the quantity and quality of funds spent in MSME recovery can be tracked and also for greater openness in institutions to allow a scrutiny of financial measures undertaken for recovery.

#### c. Recommendations

Based on this case study, the following recommendations are suggested:

- Official channels should incentivize the informal MSME sector in a calibrated manner to formalize as a means of accessing institutional benefits.
- Mechanisms should be created to track the use of official funds earmarked for MSME recovery.
- Risk management schemes like BCPs for MSMEs should be mainstreamed into DRR, aided by subsidies if necessary.

- The MSME sector should be integrated into the larger DRR framework by being included in all DRR plans at the federal, state and municipal level.
- There should be a rethink on the way municipal governments can adapt federal laws concerning fundamentally important aspects of DRR, vulnerability and risk as applicable to MSMEs.
  - Further studies should be conducted on the Tabasco and Chiapas disaster experiences to examine whether disaster-affected enterprises such as those in Yajalon still occupy the same high risk areas as before, and whether the MSME sector within the municipality is expanding further. Studies should also be conducted to see if informality within the MSME sector has reduced and if so to what extent and by what means (reformed labour law, federal or state incentives, or bottom-up initiatives); and has the idea of BCP and risk insurance gained a foothold in the MSME sector?

### 4.5 : India: issues affecting MSMEs' recovery

## a. Challenges faced during MSMEs' recovery

### The invisible MSMEs: a worrying absence

The village surveys highlighted the fact that MSMEs play a critical role as agents of recovery in the community due to their linkages with it and a vested interest in promoting a speedy and lasting recovery 18. Owing to their informality and smaller size, MSMEs have the capacity to recover faster by being flexible enough to take quick decisions – provided the larger ecosystem is conducive.

However, the lack of visibility of MSME concerns in the Indian policy and institutional context at the national and state level is a significant shortcoming, as is the virtual absence of material on MSMEs and disasters, and the recovery process in India. During the field study, the District Collector of Puri recalled the statement of MSME owners that they wanted a designated authority they could access with regard to their losses and compensation and that these considerations should be included in their project planning.

## Absence of disaster management policies for MSMEs

Since disaster management policies do not have any specific elements addressing MSME concerns, there are no official yardsticks for damage assessment or direct and significant investment in the capabilities of MSMEs that address risk concerns in specific contexts. It is a telling fact that many MSME owners responding to the field survey sought a greater role in recovery and DRR processes.

Although there is a separate Ministry for Micro, Small and Medium Enterprises, a Micro, Small and Medium Enterprises Development Act, 2006 and a National Board for Micro, Small and Medium Enterprises to develop and enhance the competitiveness of MSMEs, they do not include post-disaster recovery concerns with DRR parameters. There is little mention of the impact of disasters on MSMEs in the Government of India 'Report of the Prime Minister's Taskforce on Micro, Small and Medium Enterprises', January 2010. While the Twelfth Five-Year Plan gives substantial attention to disaster risk, it ignores MSMEs. It is also important to realize that MSMEs located in hazardprone areas, such as coastal areas, are more frequently affected by disasters. Apart from major disasters (the 2011 floods), Odisha also experiences regular, lowintensity floods, which cumulatively have a greater impact on communities and MSMEs. These patterns are generally overlooked. Such instances gradually erode the capacities of MSMEs over a period of time unless they are specifically addressed.

#### Inability to capitalize on strengths

As mentioned in the previous chapter, an inability to harness the skills of MSMEs in activities such as building cyclone shelters in Odisha miss an opportunity to create a more positive environment by addressing livelihood and DRR concerns at the grassroots level. As the case study points

<sup>&</sup>lt;sup>18</sup>Building the businesses that rebuild after a disaster', http://www.changemakers.com/g20media/post-disaster

out, all the ongoing DRR activities of the Odisha State Disaster Management Authority have a component of community involvement in which the MSMEs could be included. However that is not the case.

### Unmet recovery needs, lack of insurance mechanisms

Any financial assistance that comes the way of MSMEs is under general livelihood support measures which do not help them go beyond replacing assets and financial assistance. The crucial areas in which they need help, such as identification of markets, among others, are ignored. Further, the lack of insurance protection for micro and small businesses leaves them dependent on informal coping mechanisms. This makes recovery much harder.

#### b. Recovery: key lessons

The present study offers a number of lessons with reference to the coverage and role of MSMEs in disaster recovery.

## Change of perspective regarding the MSME sector critical for recovery

While the MSME sector generates the maximum employment second only to agriculture, there is no 'evidence' of disaster effects on MSMEs on the GDP of the state or nation as the majority of MSMEs fall in the informal sector economy. The role played by these MSMEs in diversifying the local economy and providing employment is not taken into account. Also ignored is the fact that disasters do have an impact on state finances on the expenditure side. At most, ad-hoc assessments are conducted in select locations to arrive at some estimates of loss to announce immediate relief measures.

Further, repeated exposure to extensive risk affects growth potential and limits the risk-

taking abilities of MSMEs which can weaken their resilience to future shocks. Reducing risk involves an amalgam of ideas, investment and incentives which are often not made available to MSMEs. They are expected to reduce disaster risks on their own and some do, although very few. Hence, unless the capacities of this sector are tapped, it will continue to be marked by a lack of resilience in the community.

## Need to look beyond narrow growth perspective

Most MSME policies and schemes in India are growth oriented and focused on the formal sector. There is an urgent need to develop a perspective that creating policies for post-disaster recovery of MSMEs, keeping DRR needs in mind is also an integral aspect of growth.

## Providing access to credit and financial assistance important for recovery

The survey highlighted the fact that difficulties in accessing capital was one of the greatest challenges faced by MSME owners, whether in expanding their businesses in normal times or recovering from the floods. It was also the biggest impediment for villagers in establishing a secondary source of income. Adequate coverage of MSMEs in relief and recovery assistance programmes, especially at the grassroots level, is crucial.

#### c. Recommendations

Based on the village surveys, the following recommendations are suggested:

 The framework of disaster preparedness of MSMEs should be improved by including MSMEs in disaster management policies, plans and institutional mechanisms.

- Appropriate post-disaster impact assessments for MSMEs should be developed and mainstreamed in standard assessment practices.
- Ways should be devised to provide MSME owners access to credit and financial assistance. This can be done through existing public and private microcredit programmes. Banking services and cash transfers should be significantly enhanced at the grassroots level. MSMEs' access to various disaster-specific funds, such as the Calamity Relief Funds and soon-tobe-established Mitigation Funds, should be improved; and concerted efforts should be made to encourage banks and financial institutions to take a leadership role in increasing MSMEs' access to capital, especially those located in disadvantaged areas.
- The scope of capacity building in existing community development and disaster management programmes run by the government, NGOs and humanitarian agencies can be expa-

- nded to include MSMEs, addressing their specific needs.
- Insurance mechanisms should be created on a priority basis as a matter of public policy. As a first step there should be a scoping study to gauge the demand and extent of coverage of social protection for MSMEs adversely affected by disasters. The National Disaster Management Authority can work out the framework and template for ensuring that MSMEs are protected under District Disaster Management and Community Disaster Man-agement planning processes. Social welfare and social sector institutions should also assume a leading role in extending social protection coverage to MSMEs.
- Regarding insurance protection for informal sector workers, as suggested by the Planning Commission, there should be a focus on providing social security to unorganized workers in the MSME sector according to the terms of the mandate under Unorganized Workers Social Security Act<sup>19</sup>.



### 4.6: Recommendations

Based on the three case studies it is possible to flag some basic recommendations essential for the recovery of MSMEs in the aftermath of a disaster:

- The MSME sector should be integrated into the larger DRR framework by being included in all DRR plans at the federal, state and municipal level. Recovery plans should include a specific MSME component including:
  - Appropriate impact assessment as part of standard assessment practices; and
  - Policy initiatives for assistance.
- Rather than perceive MSME recovery only in terms of government centric efforts, it should be conceived of as a conjunction of government policies and measures, and initiatives by the private sector, industry and business networks, civil society organizations, and the MSME sector itself.
- There should be easy access to credit and financial assistance for MSMEs, be it disaster-specific funds, grants, or subsidized loans for revival. Financial institutions should be encouraged to provide them greater access to capital.
- There should be a public policy of providing appropriate and adequate insurance coverage tailored to the specific requirements of MSMEs which, among others, should be evident in the form of

- prompt payouts in the event of a disaster.
- Risk management schemes such as BCPs should be put in place for MSMEs. In the case of micro enterprises, especially in developing countries, innovative measures such as low-cost, collective BCPs should be devised and mainstreamed into DRR with the help of subsidies if required.
- Finally, there should be a considered effort at the policy level to consider ways of integrating the MSME sector into the formal economy keeping in mind its increasing importance to the overall well-being of economies and societies.

### 4.7 : Conclusions

By placing the individual country studies of Japan, Mexico and India alongside, this report creates an interesting pattern that eventually highlights the same aspects as being crucial for the well-being of the MSME sector.

The formalization of MSMEs and financial integration into the economy holds the key to their access to social security and institutional backing in the form of start-up support, consultation and access to credit in normal times and financial assistance in times of crises. All three case studies showcased examples of MSMEs being among the first responders

in the community following a disaster. The difference being that in the absence of an ecosystem responsive to issues of MSMEs in Mexico and India, the efforts of enterprises in both countries assumed an episodic quality calculated to wear them down gradually. Whereas in Japan, MSMEs became the focus of a collective endeavour that saw in their recovery the longterm prospects of DRR for society as a whole. Creating such a positive ecosystem requires a basic acknowledgement of the importance of the MSME sector in a nation's economy and community, both as an engine of growth and bulwark of DRR at the frontline.





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