



Preparing MSMEs for effective disaster management



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1. Foreword

Chennai witnessed the heaviest rains in over 100 years in November 2015, affecting the city to a great extent Thousands of houses were submerged, property was damaged, and the very fabric of was life disrupted due to the shortage of essentials and disruption of all public utilities, power and telecom. spirit on Chennai should applauded and the fact that the entire city united to fight against the natural calamity, should be appreciated. Not just large corporates, but thousands of individuals contributed in cash and kind to help those who were affected by the floods, thereby setting an example of an ideal society, where we stand with one another.

CII formed a National Task Force for Relief and Rehabilitation, headed by Mr. Seshasayee, who was the former President of CII. The task force sprung to action immediately and helped in mobilising resources for rescue, relief, short and long-term rehabilitation. We acknowledge the support received from our members, volunteers and our staff.

What is not largely known to most people is the devastation caused by the floods to Micro, Small and Medium Enterprise (MSMEs) in the industrial estates not only in and around Chennai, in Cuddalore, Thiruvallur, but also Tuticorin and other surrounding districts. Thousands of micro, small entrepreneurs suffered complete suffered damage. Entrepreneurs their financially, as property business both were impacted by the floods...

CII, as India's primary business organisation, took initiatives to not

only help our own SME members, but also the larger MSME industry. Moving very quickly, on 7 December 2015, CII submitted a petition to the Union MSMEs, Minister for and to Secretary MSME, Government of India, assist MSMEs revive from the disaster. This was followed up with additional representations to the MSME Ministry and to the Finance Ministry in New Delhi. We interacted with the Government Of Tamil Nadu and the Reserve Bank of India for relief packages to MSMEs

Meetings were organised with banks, insurance companies, experts and MSME members to discuss, highlight and arrive at action plans on relief matters. In this context, major MSME associations and its members in Tamil Nadu were invited to join the effort.

Based on the feedback received, we realised that insurance was a major weakness and assisted MSMEs associations by arranging insurance workshops at different industrial estates. CII office bearers also interacted with banks and insurance companies to request their guidance and assistance for helping MSMEs.

Our extensive interaction with MSMEs, both within CII and with other MSME associations, indicated that small enterprises were completely unprepared to handle natural disasters like the recent floods. In this context, engaged KPMG in India to prepare a report on how MSMEs should protect themselves from such disasters, and the steps they need to take to safeguard themselves from unforeseen circumstances.



1. Foreword

It is our duty to acknowledge the wonderful support, co-operation and guidance given by all our MSME associations.

We hope this report will be useful to MSMEs in protecting themselves from natural disasters. We realise that this is only a small step to take in a long journey, however, this is indeed good for the development of the MSME sector, which is the backbone of Tamil Nadu's economy.

We also acknowledge with deep gratitude for the support received from the Government of India, Government of Tamil Nadu and the senior officials, the banks, the insurance companies and insurance experts.



T. T. ASHOK Chairman, CII MSME National Committee Former Chairman CII – Southern region



1. Foreword

The floods that hit many parts of Tamil Nadu in November 2015 were a reaffirmation of the very serious threat of climate change faced by our planet and the subsequent compounding effect of disasters owing to man-made factors such as environmental degradation and poor infrastructure planning. The crippling impact on industries was of an unprecedented level with automobile, IT and manufacturing industries suffering the bulk of the impact.

The central government's initiatives such as 'Start Up India' and 'Make in India' highlights the increasing government focus on nurturing indigenous industries and augurs well for promotion and advancement of the MSME sector in the the commendable country. Despite contributions made by the MSME industry to the country's economic growth, the Chennai floods of 2015 were an example of their under preparedness in terms of disaster management and recovery.

The impact of the floods was especially negative for MSMEs due to their lack of management mechanisms compared to their larger counterparts. It is essential for such firms to build a sustainable working environment that is resilient to natural disasters and has the capacity to resume critical operations in minimal time to ensure business continuity, in order to to maintain their competitive advantage. In addition, due to the inherent inability of MSMEs to get appropriate support from banking and insurance agencies, the impact was the and industry escalated comparatively longer period for revival

At KPMG in India, we are committed to helping firms achieve sustainable growth by providing an appropriate approach to help businesses remain resilient and stable during natural disasters by implementing

strong business continuity plans. As part of this report, We have worked closely with CII and its supporting associations to conduct primary research among the flood affected businesses to assess the adequacy of their internal disaster response framework and to address the focus areas of improvement. We also conducted workshops, facilitated by the CII, with industry representatives to understand the major challenges (both internal and external) in the event of a disaster and their role in enabling business continuity. This report provides recommendations for disaster preparedness and recovery of MSME clusters, which we hope will serve as a guide for MSMEs while preparing their stable business continuity plans.

We acknowledge the immense support received from CII and other participating associations, towards the facilitation of this study. As MSMEs are becoming one of the focus areas of growth for the next generation of India. KPMG in India looks forward to supporting the entire ecosystem of stakeholders to make MSME initiatives in India a success



Nilaya Varma Partner and Head Government and Healthcare KPMG in India

2. Associations that supported the report

CII has collaborated with the various MSME associations in and around Chennai for this report, the content of which is based on the meetings and discussions with the below associations

- Tamil Nadu Small & Tiny Industries Association
- Ambattur Industrial Estate Manufacturers Association
- Manali Industries Association
- Thirumudivakkam Industrial Estate Manufacturers Association
- SIPCOT Irungattukottai Manufacturers Association
- The Industrial Estate Manufacturers Association
- Tamil Nadu Small and Medium Industries Mutual Association
- South Chennai Industries Association
- Indian Drug Manufacturers Association
- Thiruvottiyur Small Industries Welfare Association
- Thirumazhisai Industrial Estate Manufacturers Association





3. Introduction

Chennai has been inundated by four major floods in the last decade - 2005, 2010, 2013 and the most recent one in 2015, which was brought about by the heaviest rains in a century, caused unprecedented damage, bringing the city to a standstill. U.K.-based reinsurance broker AON Benfield estimated Chennai floods as the eighth most expensive¹ natural disaster to have hit the in 2015. Small and enterprises, automobile and engineering industries, Information Technology (IT), ITeS, textile and tourism were the worst affected sectors by the massive rainfall.

Vulnerability

Chennai is particularly vulnerable to flooding owing to its low elevation above mean sea level, which means that a lot of its neighborhoods are at sea level making the task of drainage an even bigger challenge. The rapid urbanisation and destruction of wetlands has also compounded the troubles of the city, with key waterways, such as the Adyar and Cooum rivers and the Buckingham Canal, longer capable of draining no floodwater at desired capacities. The sewage infrastructure too is ill-equipped to cope with rampant flooding due to the lack of enough lines and pumps to deal with the huge population. A 2011 study by National Institute of Disaster Management² (NIDM) noted that the city has only 855 km of storm drains against 2,847 km of urban roads and the total area of 19 major lakes in the city has nearly halved from 1,130 hectares to about 645 hectares.

The city, hence, faces a very real threat of reoccurrence of a calamity of this scale or worse, which makes it essential for industries to put in place the necessary

disaster recovery mechanisms to ensure minimal impact to infrastructure, business continuity and, most importantly, human lives.

The Chennai floods of 2015 caused extensive damage to industries and businesses and the impact was felt to a higher extent in the case of Micro, Small and Medium Enterprises (MSMEs).

The data related to damages from actual responses received from CII members and other associations is as below:

Particulars of damages to MSMEs ³		
Number of units affected due to loss of machineries and raw materials in all rain affected districts	8,500 approx.	
Number of workers affected by floods in industries (direct employment)	56,000 approx.	
Number of units affected by floods indirectly	20,000 approx.	
Number of workers affected (indirect labour)	160,000 approx.	
Value of damage by machinery and building	INR 1000 crore approx.	

Note: Total value of the damage is estimated to be much higher.

This report focusses on assessing the current disaster preparedness level of MSMEs based in Chennai, analysing the gaps in the same compared to leading international practices, and proposes an effective disaster preparedness and management framework to suit the needs of the MSME sector in the city. It also provides recommendations to be adopted by the government, banks, insurance companies and MSMEs in the near future.

- 1 2015 Annual Global Climate and Catastrophe Report AON Benfield, January 2015
- 2 Urban floods in Bangalore and Chennai: risk management challenges and lessons for sustainable urban ecology NIDM , 10 June 2011
- 3 Estimated figures provided by CII Chennai and supporting associations





Analysing the impact of the 2015 Chennai floods on MSMEs



4. Impact on the MSME sector

MSMEs were the most affected from the devastating floods in Chennai, incurring an estimated loss of around INR1,700 crore by the most conservative figures in just two weeks of peak flooding, according to a report released by Small and Medium **Enterprises** Rating Agencies (SMERA)4. The figures rise even further if opportunity costs and job losses are taken into account. However, since the figures are only related to the manufacturing sector, they do not take into account the losses incurred by the services sector, which come to substantial amount

Several MSMEs are part of a supply chain that cater to large manufacturing and automobile industries. A delay on the side of the MSMEs can have huge ramifications on the overall supply chain, and most customers may not be willing to wait for production to get back on track to meet the shortfall. These customers may resort to alternative sources of supply, resulting in loss of business for MSMEs, making recovery even more challenging.

Compared to large MNCs, MSMEs are more vulnerable to natural hazards due to resource, knowledge, planning and experience gaps. MSMEs, especially in developing countries, have additional constraints such as informal operations which keeps them out of the reach of disaster risk management strategies like insurance, lack of ability to diversify their supply and customer base and lack compliance with norms regulations thus increasing disaster risk, lack of social protection for their employees and so on⁵.



The challenges they face durina calamities have a domino effect on the supply chain involved, and yet MSMEs do not have proper business continuity plans in place. Disasters affect MSMEs' operations because of the resultant supply and demand constraints and may also result in huge financial burdens through resources spent for physical reconstruction, and loss of business continuity through loss of inventory, etc. All these factors suggest an increased vulnerability of MSMEs in, especially in post-disaster situations.

^{5 -} Small Businesses: impact of Disasters and Building Resilience – United Nations Office for Disaster Risk Reduction (UNISDR) Report 2013



^{4 -} Chennai Floods: Small Units Stand to lose INR 840 crore per week - The Hindu Business Line/SMERA Agency, 8 December 2015

4. Impact on the MSME sector⁶

Impact on infrastructure:

Infrastructure damage is the severe source of financial stress for MSMEs post natural disasters of any type. It can lead to business closure for extended periods while infrastructural repairs take place to restore operations. This, naturally, calls for large amounts of which is an unforeseen resources financial burden. Moreover, if MSMEs do not have insurance cover or lack resources for these repairs, the entire survival of the business can be under disasters threat. In case of magnitude like the Chennai floods, even if operations do resume somehow, physical damage to infrastructure can continued dip in business lead to performance of surviving firms as longer closure periods could lead to loss of customers. In addition, disruptions after disasters regarding the provision of utilities such as electricity, water, fuel and natural petrol gas), transportations and telecommunications, can be responsible for businesses closing down.

Impact on business continuity:

Damage to property and premises can, in turn, disrupt the business operations of manufacturing MSMEs as it causes extensive losses to raw materials in inventory, work in progress goods as well as finished goods in storage. Not being able to honor their commitments to customers can be a huge blow to MSMEs as they are verv replaceable by other firms. This, along damage to manufacturing equipment and machinery, may lead to extended disruptions to the production cycle. The longer it takes for an MSME to recuperate and get back to normal operations, the more attrition it can face from consumers.

As the demand side of operations weakens, sales turnover dips MSMEs find it difficult to manage their accounts payable to their suppliers, the financial stress is exacerbated by the fact that most MSMEs do not have adequate insurance coverage to provide protection during these times. Futher, they do not have sufficient access to reliable credit facilities for quick loans that can help them stabilise their operations, owing to which MSMEs have to rely on aid from central or state agencies. However, by the time help comes their way, it could be way too late to build back the eroded consumer base.

Impact on employee health and safety:

Immediate evacuation of employees to safer locations is of prime importance disaster. during natural **Prompt** medical attention through first aid can address the immediate injuries that employees sustain. However, the staff can still be vulnerable to the numerous health hazards that prevail in the days, and even weeks, after the outbreak of a flood. Water-borne diseases, such as leptospirosis, diarrhea, malaria, dengue, cholera and typhoid, are the most common epidemics that can spark after a flood. Employees who may already be under severe personal financial distress because of the losses incurred during a natural calamity may come under more strain in the event of a disease outbreak. Lack of proper health insurance cover for employees may prevent them from seeking timely and quality medical help. Employees are the prime asset for any organisation and, for an MSME with limited staff, each member counts, thus making it crucial for employees to regain their health and resume their duties at the earliest

6 - KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods



5. Challenges faced by the MSME sector

The following are the high level challenges faced by MSMEs in Chennai in terms of disaster preparedness⁶.

Category	Challenges
Insurance	 MSMEs are sometimes not aware or are not educated enough to deal with claims management The long drawn processes of claims and lack of documentation of business assets has led to rejection of claims, thereby creating low confidence in the insurance mechanism There is a lack of awareness of information needed to support claims leads to undervaluation of losses Insurance does not cover raw materials and inventory Low familiarity with insurance coverage can also lead to undercoverage Indirect losses are not recognised and, hence, not calculated.
Banking	 MSME sector has not received the required support from the banking sector due to structural issues Centralised banking procedures have led to unsatisfactory structure of sanctioning disaster relief loans, with no local guidelines being issued to banks Track record of companies is not taken into account while extending loans for disaster relief Immediate relief measures offered by the banks are inadequate, e.g. the extension of overdraft limits by 10 to 15 per cent The State Level Bankers' Committee (SLBC) guidelines issued and RBI circulars are not fully implemented Banks should look at extending all possible support in terms of working capital flexibility, overdraft limit extension, term loans, letter of credit, etc., considering the track record of MSMEs and order book values.
Infrastructure	 Industrial estates are in flood prone areas. Waterline, gradient and water-flow studies were not taken into consideration before setting up factories No storm drain facility is available to divert water to water bodies Several estates have implemented incorrect master-plans. Lack of training and knowledge on the banking, insurance, accounting and book keeping processes Unorganised micro sector employs contract staff and do not have any cover like Employees State Insurance or Provident Fund
Government	 Lack of standard guidelines for assessing the losses The tax holidays provided to MSMEs are not sufficient to enable revival The calculation of various fees and taxes basis the past six months or one year industrial output data seems to be an inadequate benchmark for any calculation of losses, payment of utility bills and tax holidays The existing industrial estates are very old and may have had no infrastructure upgrades since their inception

6 – KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods





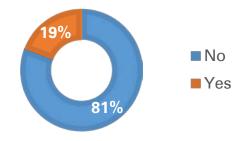
Analysis of current disaster preparedness level of MSMEs

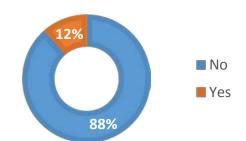


6. Current preparedness levels of MSMEs

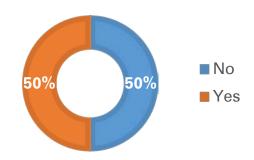
In order to assess the current preparedness level of MSMEs in Chennai to deal with floods, a primary research survey was conducted for MSME units in the region through a questionnaire. The survey was facilitated by the CII and other supporting associations and was conducted between January 2016 to February 2016. The responses to the survey questionnaire are highlighted below.

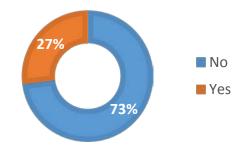
- Does your organisation have an internal disaster response to ensure minimal business impact?
- 4. Have you developed external contingency plans with your clients or suppliers?



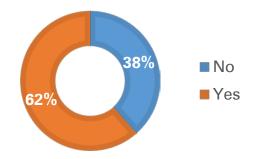


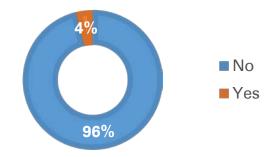
- 2. Are your stock, electrical fittings and valuable equipment stored elevated above flood level?
- 5. Is your entire staff aware of and trained in flood safety procedures?





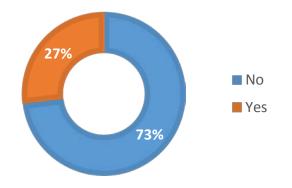
- 3. Do all members of your staff have health insurance coverage provided by your organisation?
- 6. Do you have emergency safety equipment such as lifeboats or inflatable boats stored in the workplace?

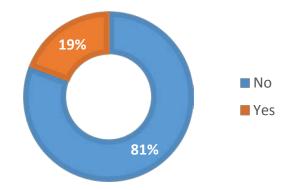




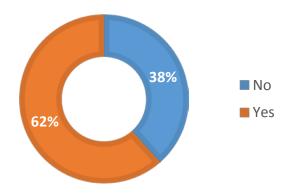
6. Current preparedness levels of MSMEs

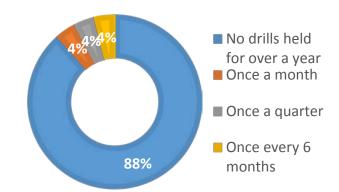
- 7. Do you have a stockpile of flood protection material in your manufacturing unit(s)/office(s) such as plywood, plastic sheeting, unfilled sandbags and sand, blocks of wood with nails and hammers to create barricades?
- 10. Does your organisation have an evacuation plan to transport out finished goods, raw materials and valuable portable equipment to a safer location in the event of a flood?



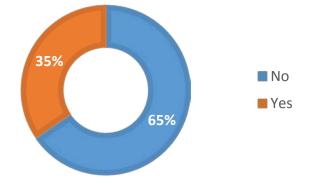


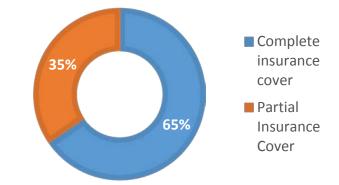
- 8. Do you have the emergency contact information of your utilities suppliers (gas, electricity, water) so that these can be turned off in the event of an impending disaster?
- 11. How often does your organisation hold mock drills to gauge disaster preparedness?





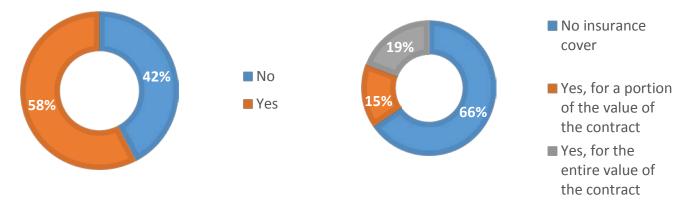
- 9. Does your organisation have an emergency evacuation plan and safe assembly points in the event of a disaster?
- 12. Do you have insurance coverage for your manufacturing unit(s)/office(s)?



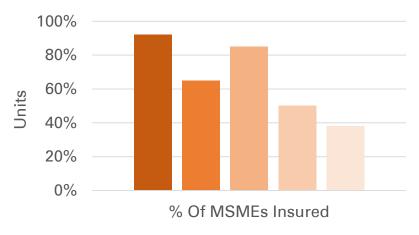


6. Current preparedness levels of MSMEs

- 13. Are you aware of the information you need to provide to your insurer to support your claim?
- 14. Do you secure insurance coverage for the contracts between you and your clients and your suppliers?



Insurance cover by type of calamity





Source: KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods

6. Current preparedness levels of MSMEs⁶

The analysis of the responses gathered from the MSMEs during the study highlights the under-preparedness of the sector in facing and recovering from natural calamities with respect to the following aspects:

Business recovery plans: Owing to the informal nature of operations of several MSMEs, there are no formally documented internal disaster recovery plans that identify the possible disasters that the business is at risk from, the likelihood and impact of these disasters and the set of activities to be carried out before and after the occurrence of a disaster to reduce impact and resume operations at the earliest.

During these natural calamities, MSMEs' coordination with suppliers, their partners vendors and should enhanced to help entities arrive at adequate business continuity measures, so that an incident affecting them does not adversely and drastically affect operations. A key component of any business recovery plan preparedness of an organisation's staff to handle an emergency. Most MSMEs do not have their staff aware of and trained in emergency safety procedures. Neither do they stock emergency safety equipment stored in the workplace in case of an emergency. Organisations also do not store basic flood protection materials that can greatly help protecting critical assets and help lighten the impact of flood water and debris induced damage.

Location constraint: Adding to the vulnerability of MSMEs is the fact that industrial estates are located in low lying flood prone areas that have no storm water drainage facilities.

The offices and manufacturing units in the region are not elevated, and the internal electrical wiring is not constructed by taking the 100 year flood level of the area into consideration.

Inadequate insurance cover: Insurance cover is one of the most critical pillar for any support in disaster recovery mechanism to cover financial losses. However, due to lack of awareness, most MSME view insurance coverage as an expenditure rather than an investment for protection. Infrastructure is insured for many organisations, however, they do not see the importance in insuring their raw material and finished goods. The contracts they enter into with their suppliers and customers are also not insured which makes it harder to resume business operations at the earliest. There is a critical need for sensitisation on the importance of sound insurance followed implementation of policies that offer financial protection to help the business get back on track at the earliest.

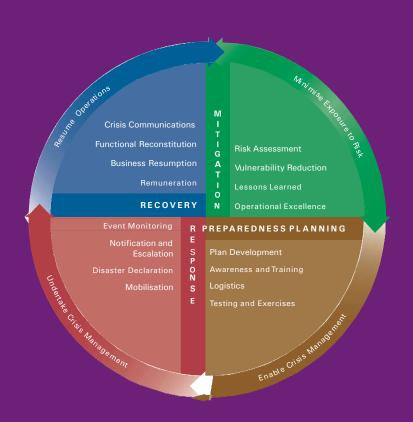
Banking support: Inadequate banking support in terms of loan waiver, extending the loan period, increasing the working capital, term loan limits, providing moratorium etc. are some of the measures that need to be considered by banks and RBI. The current RBI /SLBC guidelines do not have adequate recommendation to banks on dealing with disasters.

6 – KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods





Effective risk response framework



7. Risk Response Framework for effective post disaster recovery

Post-disaster recovery models generally have a stronger focus on infrastructure restoration and other elements physical recovery than on building economic resilience through business According continuity. to Global Assessment Report on disaster risk reduction United **Nations** by the International Strategy for Disaster Reduction (UNISDR) in 2013, MSMEs are at the forefront of livelihood recovery after disasters as local MSMEs are the engine of local markets which underpin effective recovery efforts. Communities trying to rebuild need goods and services at even higher levels than durina pre-disaster times. Income provided opportunities generating directly (e.g. employment) or indirectly (e.g. demand for goods and services) by MSMEs, even if temporary, can act as an economic buffer in times of distress. The local MSMEs step engines of economic community recovery, the better the prospects of post-disaster sustainable recovery becomes, with local MSMEs placed to identify needs of the changing recovering community and finding ways to meet

In addition to this, recovery of local important economic activity is an indicator of the pace at which community is recovering, that can public promote new and private investment. Hence, livelihood recovery strategies focussing on the survival and recovery of local businesses are likely to the recovery of the community⁷. Moreover, if the recovery of MSMEs is sluggish, they tend to be replaced bigger MNCs. by leveraging MSMEs as catalysts of local socio-economic recovery is of prime importance and requires investment to focus on both infrastructure restoration. financial back-up, as well as a robust socio-economic policy framework⁶.

Stakeholders Involved

The following are the major stakeholders who play an important role in disaster preparedness and post-disaster recovery.

1. Government

As per a 2013 UNDP study⁷, immediate post-disaster financial, technical and support roles political are performed by central level institutions which possess greater capacity and decision-making power than government institutions that themselves are disaster affected⁷. Alternatively, predisaster cooperation agreements can be signed with neighboring local government institutions which can ensure prompt delivery of aid. By building such pre-disaster partnerships, local-level institutions can adequate response to affected MSMEs and curtail the disruptions to their operations. Central governments also responsible for ensuring that during post-disaster recovery, the business environment remains as stable possible for **MSMEs** develop to appropriate strategies and make decisions. State-level institutions should also provide adequate disaster recovery measures such as financial and logistic support to MSMEs.

2. Non Governmental Organisations (NGOs)

NGOs that are functional in an area reliable understanding of the socio-economic structures prevalent in the region before the disaster⁷. Their focus is more on reinstating livelihoods which complements the infrastructure focussed efforts of governments⁵.

^{6 –} KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods 7 – Small Businesses: impact of Disasters and Building Resilience – United Nations Office for Disaster Risk Reduction (UNISDR) Report 2013



7. Risk Response Framework for effective post disaster recovery

NGOs also act as effective 'brokers' between the private sector and government agencies to implement long term socio-economic recovery after the immediate emergency disaster response phase is over. They also serve as a timely source for MSMEs to receive technical and financial inputs to resume normal operations

3. Associations

Business Associations of MSMEs are instrumental in ensuring that disaster response aids meets their needs. Governments often seek the support of associations on areas such as data collection, sector specific strategic advice, coordination of stakeholders and assessment of the effectiveness of disaster response aid programmes.

4. Banking and Insurance Sectors

Insurance companies should proactively support MSMEs for claims processing. This should be in the form of support in filing, conducting claims inspections, accurate reporting to arrive at a shorter claims processing time. This calls for Standard Operating Procedures (SOPs) for insurance companies during calamities from the government's side. The Insurance Regulatory Development Authority (IRDA) also has a greater role to support the insurance companies and MSMEs.

Banks and RBI need to be proactive and also support business rejuvenation proposals in terms of soft loans, extending the term limit/working capital limit and period, etc. Better coordination with State Level Bankers' Committees and the RBI to frame SOPs for acting on disaster recovery is also required.

Following are some focus areas that should be included to arrive at a wholesome risk response framework⁶:

	Response framework focus areas
Infrastructure	 Structural maintenance considerations Back-up power supplies Flood protection materials Accessibility for evacuation and rescue operations Emergency repair contracts
Staff	 Extensive training in emergency response and first aid Early notification mechanism to ensure speedy evacuation Comprehensive health insurance – including families
Business continuity	 Secured storage for critical tangible and non-tangible assets Robust insurance policies. Coordination with suppliers and customers with well documented plans to resume operations Financial support

6 – KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods



7. Risk response framework - steps⁶

Steps

Know the region and the likely disasters it can face

Identify emergency contacts and enter into post-disaster assistance agreements

Identify an internal planning committee responsible for developing a BCM strategy

Develop emergency response plan with procedures to be followed

Purchase necessary safety equipment, as identified

Provide emergency preparedness training to employees

Conduct regular preparedness drills

Engage in collaborative preparedness exercises with local community

Guiding factors

- Disasters that have occurred in the past.
- Proximity to dangerous areas like large water bodies, transmission stations.
- Utility companies, local public health institutions, emergency medical services, neighboring businesses etc.
- Scope, aim and objectives of the strategy.
- Leadership structure with designated responsibilities.
- Pre-disaster precautions, disaster evacuation plans and shelter points.
- Identification of essential business functions.
- · Agreements with suppliers and vendors.
- First aid kits, emergency supplies and flood protection materials.
- Roles and responsibilities of key personnel.
- Warning and communication procedures
- · Evacuation routes.
- · First aid training.
- Assess readiness of employees as well as business facility.
- Use lessons learned from drills to improve procedures.

6 – KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods





Our recommendations



8. Recommendations - policy and structural measures

Based on the inputs from the MSME associations in Chennai that participated in this study, we recommend the following measures that may help in improving disaster preparedness and facilitate faster revival of disaster hit MSME units.

Government (central and state):

- The central government needs to issue appropriate guidelines to assess the losses due to floods for MSME sector, which should be circulated to banks/insurance agencies
- It should also provide adequate directions to RBI/banks/insurance agencies on flood relief measures and carry out proper implementation of the same
- There is a dire need to centrally devise and implement adequate mechanisms for customer redressal in case of nonsupportive actions from banks, insurance agencies, etc.
- State government should have policies supporting SOPs to guide the tax departments for with respect to waiver of taxes/tax holidays post the calamity period
- It should also provide directions to utility agencies for waiver of payments/holiday period post calamity period
- The state should support the rebuilding of the damages in industrial estates post disaster, and should also take adequate actions to ensure these estates have precautions against natural calamities
- The master plan for industrial estates and other surrounding infrastructure needs to be revised, as several of the new infrastructure projects have elevated the roads, affecting the free flow of natural drains

- New land development by government need to consider the overall master plan for the industrial estates and provide adequate measures for addressing natural calamities
- Legal assistance needs to be provided on insurance, banking and pending contracts

Banks/RBI

- RBI circulars on MSME lending guidelines may be extended to include assistance extended by banks during natural calamities
- RBI guidelines for Relief Measures by Banks in Areas Affected by Natural Calamities should cover MSME specifically and appropriately as a sector
- RBI should issue guidelines for rehabilitation packages for the MSME clusters post calamity period in consultation with banks
- Banks need to take a more proactive view to ensure the revival of the MSME clusters by providing adequate facilities of term limit, overdraft, loan holidays, increasing working capital limit, etc.
- Banks should also provide consultancy support for educating the MSME sector on maintaining the book of accounts so that proper records are available
- Banks should ensure the SLBC has local guidelines for each MSME sector and are adequately covered to meeting disaster recovery measures
- State-level institutional committees and empowered committees need have local branches that are authorised to take decisions and support MSMEs.



8. Recommendations - policy and structural measures

MSMEs:

- The master plan of the industrial areas needs to be revised. Over the years, major infrastructure projects have come up which has elevated the nearby land and roads. As a result the natural flow of water is blocked in these industrial areas which results in flooding
- Companies should provide more attention to book keeping and proper accounting procedures. Statutory bodies/institutions may consider standard practices only for support mechanisms such as loans/insurance claims, etc.
- MSMEs should receive training on banking, insurance, and legal policies and processes. This may help them in choosing the adequate instruments for coverage and protection
- Adoption of standard personal insurance policy for employeescould be in the form of cluster-based group insurance schemes, so that the premium is affordable for MSMEs
- MSMEs need to have robust documentation and robust IT systems in place, e.g. cloud based solutions such as Software as a Service (SAAS) for clusters
- MSMEs can also initiate a clusterbased fund pooling which can be used in case of emergency.

Insurance companies

- Standardisation of a transparent and adequate assessment of losses according to the kind of disaster is a must
- The filing of claims and subsequent processes should be made simpler and easier for MSMEs
- Insurance companies need to assist in documenting the losses to ensure legal backing for the coverage
- A helpline, if established, can help ensure that claims are processed within a stipulated timeframe
- Guidelines need to be issued to MSMEs on the process of filing insurance and receiving claims by insurance players.





8. Recommendations - the BCM approach for MSMEs

The Business Continuity Management (BCM) approach can be divided into six steps as elaborated below⁸.

1. BCM programme management

- Develop a BCM approach and set out the scope, aim and objectives, and the activities needed to be carried out to deliver these
- Formulate a communication plan to increase awareness of the BCM approach to the organisation's stakeholders

2. Business impact analysis

- Identify and document the organisation's key functions and services
- Recognise the activities and resources required to deliver these functions
- Assess the impact that a disruption of these activities may have on the organisation

3. Determine the BCM approach

The following activities can be adopted to protect the organisation's key resources.

Resource	Recommended approach
People	 Enable cross deployment and allow staff to undertake unfamiliar roles through multi-skill training and cross-training of individuals Properly document succession planning Use third party support and contractual agreements to supply manpower
Technology	 Keep old equipment as emergency replacement or spare in separate locations to restart operations.
Information	 Allocate data backup and storage at different offsite locations Secure essential documentation in safes with copies in different locations.
Suppliers and partners	 Store supplies and inventories at different physical locations Resort to dual or multi-sourcing of materials Identify alternative/back-up suppliers Apply penalty clauses on supply contracts



8. Recommendations - the BCM approach for MSMEs

4. Develop and implement BCM response

This involves the creation of arrangements that detail how to manage and respond to any disruptions due to natural disasters and how to get critical activities back on track at the earliest so as to support key functions. The content of the BCM response plan should include:

- A. Scope
- B. Key roles and responsibilities
- C. Key contact details of stakeholders
- D. Business Recovery plan based on impact assessment carried out in step 2.
- E. Resources and methods required to mobilise the above plan.

5. Support mechanism from government / banks / insurance

This involves creation of a master action plan by agencies such as the National Disaster Management Authority (NDMA). The action plan should have the following components

- A. Identify the stakeholders
- B. Define the course of action for each stakeholder in disaster
- C. Coordinate / support other stakeholders during and after disaster
- D. Develop a standard framework for assessing the damages
- E. Establish directions/create circulars so that banks, insurance agencies, etc. can provide adequate support in terms of financial assistance and insurance cover
- F. Utilise personal health services like Employee's State Insurance (ESI) for employees
- G. Create a disaster management fund at local level for emergency support
- H. Provide adequate training and sensitisation on the impact of disasters and the need to take adequate measures



8. Recommendations - the BCM approach for MSMEs

The following table can be helpful for MSMEs in documenting an appropriate BCM approach:

Risk	Key functions impacted	Arrangements in place to reduce impact	Additional arrangements required
Loss of staff			
Loss of IT and telecommunication systems			
Loss of utilities such as electricity and water			
Loss of premises			
Loss of suppliers			
Loss of transportation			

6. Test and review the BCM arrangements

The BCM approach on paper cannot be relied upon unless it is implemented through mock drills and live exercises, and found to be workable. There should also be a system in place to help ensure that the arrangements and plans are reviewed and updated following exercises and incidents, or following changes within the organisation



8. Recommendations - operational measures

The following are some basic precautions that businesses can take to protect their infrastructure⁹.

- 1. Addition of waterproof veneer to exterior walls:
- The process comprises of a layer of brick backed by a waterproof membrane.
- Changes are made to the interior walls as well to resist moisture damage.
- Waterproof veneer holds effective for flood water levels of up to 2 feet.
- 2. Raised electrical system components
- All components (switches, outlets, meters and service panels) should be raised at least 1 foot above the 100 year flood level of the area.
- They provide protection against fires caused by short circuits in flooded systems.
- Undamaged and functional electrical systems can help enable faster return to activities.

- 3. Raised and flood proof Heating, Ventilation and Air-conditioning (HVAC) Equipment
- HVAC equipment should be moved from basements or lower levels to top floors.
- In case of single storey establishments, a concrete block floodwall can be built, though this is less effective
- 4. Sewer backflow valves
- Flooding can cause sewage from sewer pipes to flow back into buildings from drain pipes causing severe health hazards.
- Backflow valves prevent this by blocking the drain pipes temporarily
- 5. Dry flood-proofing of buildings
- Flood-proofing can be done by Installing watertight shields over doors, windows and other openings, along with sump pumps and foundation drain systems
- Walls can be strengthened to resist the pressure of floodwater and impact of debris
- Use flood-resistant materials for construction.

MSMEs can utilise the following broad checklist for emergencies⁶

Checklist for emergency supplies to be stored on-site			
 □ First aid kit □ Emergency lighting flashlights with spare batteries □ Whistles to attract attention during a flood □ Two way radios □ Blankets 	 □ Portable pumps and hoses □ Plastic covers and tarpaulins □ Three day supply of water and non perishable food 		

6 – KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods

9 - Federal Emergency Management Agency (FEMA) - Protect your Property from Flooding, 2011



8. Recommendations - operational measures

The following is an exhaustive checklist of emergency flood protection items to be stored on site at all times. Businesses should make a detailed plan on which items of their office can be protected using each of the items listed below.

Checklist for emergency flood protection items for on-site storage⁶

Material	Usage
Sand, unfilled sand bags and shovels	To create flood barriers to block the flow of water and debris
Blocks of wood and plywood	To board up windows, doors and open gaps.
Tool kit – hammers, nails etc.	To board up windows, doors and open gaps.
Plastic sheeting	To cover all furniture, appliances and stationery equipment
Wooden pallets	To create shelves for raising and placing stock and goods above flood level.
Emergency generators	To restart functioning of essential electrical items until main power supply is restored

^{6 –} KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods





Annexures



9. The BCM checklist

The following list is designed to guide businesses on how to prioritise BCM procedures that may help them limit damage to their property and business⁶:

Before a calamity:

- Establish a BCM plan as mentioned in this document which has prevention, emergency response and recovery components.. Continuously review the plan and update accordingly to ensure readiness.
- Assign responsibilities and ensure role clarity for all employees to undertake specific advance arrangements before an impending flood and during an emergency.
- Hold regular mock drills and practice the evacuation plan.
- Identify safe shelter locations for your employees.
- Keep a list of emergency contacts utility companies, vendors, suppliers, partners and customers - in a secured location.
- Increase awareness on the information required to support insurance claims so that these can be submitted at the earliest and the claims process can be expedited with minimum hassles.
- Install sump pumps to ensure that water can be drained out at the earliest. Inspect the pumps regularly.
- Stock essential flood protection material such as sandbags, plywood, plastic sheets etc. Train staff on how to use these materials so that all precautions can be placed in minimal time.

- Collaborate with local administration and MSME associations to understand the gradient, flow and direction of floodwaters in your area so that structures can be built to divert this flow of water away from the building or underground.
- Inspect, maintain and test all backup equipment such as emergency generators, pumps and communication systems on a regular basis.
- Identify repair services needed to restore operations after a flood – preferably vendors outside local area so that their services are not effected by the same flood.
- Exercise caution while storing all water-reactive chemicals; they must not be stored below expected flood depths - Arrange to transport these to safe locations in the event of an impending flood.

During a calamity:

- Move important documents, portable equipment, raw materials, finished goods etc. to as elevated a location as possible within your premises. If logistical support is available, arrange to transport these off to separate locations.
- Remove all chemical paints, oils, cleaners, flammable liquids, etc. from the premises.
- Apply rust preventative coating or oils to all stationary equipment that can be exposed to floodwaters to prevent corrosion.
- Seal the building to keep water out as much as possible and install flood barriers and sandbags.
- Secure all movable material to ensure that these are not washed away in flood waters.

6 – KPMG in India's analysis, 2016, based on survey conducted with members of supporting MSME associations in Chennai after the December 2015 floods



9. Business Continuity Management Checklist



- Pre-empt the possible impact upon customers by making arrangements for moving inventory and goods to another facility until flood waters have subsided. Stock up on high demand items because your suppliers can also be effected during a flood.
- Close valves in all piping carrying flammable or hazardous materials.
- Turn off all utilities like electricity, gas and water connections.
- Remove all motors and control panels from large equipment.

After a calamity:

- Conduct detailed inspections for structural damage before entering your building.
- Ensure that all electrical equipment is dry and safe to use before turning on the main supply. Also check for exposed insulators and open bus bars in electrical components.
- Replace all wiring that was submerged by floodwaters.
- Ensure that all employees receive prompt medical attention and precautionary measures are taken to protect them against epidemics before they report to work.
- Document the damage with supporting proofs.

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