

Indonesia

STRENGTHENING DISASTER AND CLIMATE RESILIENCE OF SMALL & MEDIUM ENTERPRISES IN ASIA

ENABLING ENVIRONMENT & OPPORTUNITIES



The iPrepare Business facility for engaging the private sector in Disaster Risk Management is a joint initiative by the Asian Disaster Preparedness Center (ADPC), the Asian Development Bank (ADB) through the Integrated Disaster Risk Management (IDRM) Fund and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH within the framework of the Global Initiative on Disaster Risk Management (GIDRM). It focuses on building disaster-resilient businesses in the region through partnerships to strengthen the resilience of the private sector, particularly SMEs; providing technical assistance in strengthening the enabling environment that promotes risk sensitive and informed investments by private sector; and facilitating knowledge sharing at the regional and national levels.

The Asian Disaster Preparedness Center (ADPC) is an independent regional nonprofit organization that works to build the resilience of people, communities and institutions to disasters and climate change impacts in Asia-Pacific. Over the past 30-years, ADPC has expanded its scope and diversified its operations for a programmatic approach that offers long-term and sustainable solutions to addressing the underlying causes of disasters and climate change risks.

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Acronyms

ADR	Asian Development Bank
ADPC	Asian Disaster Preparedness Center, Bangkok
AEC	ASEAN Economic Community
APBSD	ASEAN Policy Blueprint for SME Development
APEC	Asia-Pacific Economic Cooperation
APINDO	The Employers' Association of Indonesia (for Bahasa, Asosiasi Pengusaha Indonesia).
ASEAN	Association of Southeast Asian Nations
ASEC	ASEAN Secretariat
BAPPENAS	Ministry of National Development and Planning
BCP	Business continuity plan
BCM	Business continuity management
BNPB	National Disaster Management Agency (for Bahasa, Badan Nasional Penanggulangan Bencana)
APINDO	Employers' Association of Indonesia (for the Bahasa name, Asosiasi Pengusaha Indonesia),
CBDRR	Community Based Disaster Risk Reduction
CBDRM	Community Based Disaster Risk Management
CCA	Climate change adaptation
DRR	Disaster risk reduction
DRM	Disaster risk management

GDP	Gross domestic product
GIDRM	Global Initiative on Disaster Risk Management
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GVCs	Global Value Chains
IDRM Fund	Integrated Disaster Risk Management Fund, ADB
IUMK	Special business license for SMEs (for Bahasa: Izin Usaha Mikro dan Kecil)
KADIN / CCI	Indonesian Chamber of Commerce and Industry (for Kamar Dagang dan Industri Indonesia)
KUKM	Cooperatives and SMEs (for Bahasa, Koperasi Dan Usaha Dan Menengah)
MoCSME	Ministry of Cooperatives and Small and Medium Enterprises (Kementerian Koperasi Dan Usaha Dan Menengah)
MoFE	Ministry of Forestry and the Environment (since 2015)
MoT	Ministry of Trade
IPCC	Intergovernmental Panel on Climate Change
MSMEs	Micro, Small and Medium Enterprises
SMEs	Small and Medium Enterprises
SMEDF	Small and Medium Enterprise Development Fund
SMEWG	Small and Medium Enterprises Working Group - APEC
UKM	Small and Medium Enterprises - SMEs (for Bahasa)
UMKM	Micro, Small and Medium Enterprises MSMEs (for Bahasa)

Key Terminology

Business Continuity Management (BCM) - (ISO 22301:2012)

"Holistic management process that identifies potential threats to an organization and the impacts to business operations those threats, if realized, might cause, and which provides a framework for building organizational resilience with the capability of an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities."

Business Continuity Plan (BCP) – (ISO 22301:2012)

"Documented procedures that guide organizations to respond, recover, resume, and restore to a pre-defined level of operation following disruption."

Coping Capacity - (UNISDR)

"The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters."

Disaster - (UNISDR)

"A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources."

The above definition of disaster is used in the report, as it is in line with international terminology in English. Indonesia's Law Concerning Disaster Management 2007 (the DM Law) has its own definitions, which are compatible with the above, but are more detailed. In particular, it is noted that the DM Law takes a multi-hazard approach. Its definitions are given here to better understand how the term is used in the national context. Article 1 includes:

"In this law

- Disaster shall mean an event or a series of events threatening and disturbing the community life and livelihood, caused by natural and/or non-natural as well as human factors resulting in human fatalities, environmental damage, loss of material possessions, and psychological impact.
- 2. Natural disaster shall mean an event or a series of events caused by nature such as earthquake, tsunami, volcanic eruption, flood, drought, typhoon, and landslide.
- 3. Non-natural disaster means a non-natural event or a series of non-natural events such as technological failure, modernization failure, and epidemic.
- 4. Social disaster means an event or a series of events caused by humans, which include social conflicts between community groups, and terrorism..."

¹ UNISDR Terminology 2009. Available at http://www.unisdr.org/we/inform/terminology. Other relevant terms defined therein include: disaster risk, emergency response, exposure, hazard, mitigation, preparedness, recovery, risk, vulnerability.

Disaster Risk Management (DRM) – (UNISDR)

"The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster."

Disaster Risk Reduction (DRR) - (UNISDR)

The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events."

Emergency Response - (UNISDR)

"The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps."

Resilience (IPCC²)

"The ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions."

² IPCC. 2012: "Glossary of terms. In: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation." Available at http://www.ipcc.ch/pdf/special-reports/srex/SREX-Annex_Glossary.pdf

Executive Summary

A disaster-resilient enterprise is one that has the capacity to anticipate, resist or absorb, and then accommodate or recover from a hazard that affects it, returning to at least the equivalent state of economic health that it enjoyed beforehand, and continuing to grow and develop without detrimental long-term effects.

This report presents the results of a survey on the disaster resilience of small and medium enterprises (SMEs), and provides a strategic policy analysis of the enabling framework for SME disaster resilience in Indonesia. It is the result of cooperation between the iPrepare Business facility, and its key country partner, the Ministry of Cooperatives and Small and Medium Enterprises (MoCSME).

The country report is also part of a Regional Project, "Strengthening the Disaster Resilience of Small and Medium Enterprises in Asia", which is being implemented by the iPrepare Business facility and country partners in Indonesia, the Philippines, Thailand, Indonesia, with the support of the Asian Development Bank (ADB) Integrated Disaster Risk Management Fund, a fund financed by the Government of Canada, and the German Ministry for Economic Development and Cooperation (BMZ) through the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) within the framework of the Global Initiative on Disaster Risk Management (GIDRM).

Specifically, the report is based on desk research on relevant laws, policies, institutions and secondary literature, consultations during a country mission in January 2016, and the Indonesia SME Resilience Survey undertaken as part of the project. It is divided into 6 parts.

Part 1 looks at what we mean by disaster-resilient SMEs, then frames the discussion in terms of the two main categories of risk that SMEs face – (1) shared community disaster risk, and (2) business continuity disaster risk. It proposes that the existing national system(s) for climate change adaptation (CCA) and disaster management provide the most effective and efficient legal, policy and institutional basis for improving SME resilience to shared community disaster risks. For business continuity disaster risks, the national laws and institutions targeted to broader SME development provide the best vehicle for policy intervention. The two guiding questions then asked for the Indonesia policy analysis are:

- 1. To what extent do the climate change adaptation and disaster management systems either include SME representatives at national level, or integrate SMEs into local institutions, risk awareness campaigns, emergency response and recovery operations at local level?
- 2. To what extent is climate and disaster resilience factored into the picture of an economically healthy SME through policy schemes targeted at SME development and promotion?

Part 2 examines what we know about Indonesian SMEs' economic structure from national statistics, and what this can (and cannot) tell us about their disaster risk. A key characteristic is that an estimated 99.9% of all enterprises in Indonesia are SMEs, accounting for 60.3% of GDP and 97% of the total workforce. Until recently there has been no requirement for SMEs to

register, but the new system introduced in 2015 will, among other things, eventually provide more precise statistics on SMEs. This is the special business license for SMEs, or IUMK (for Bahasa: *Izin Usaha Mikro dan Kecil)*.

Part 3 presents the results of the **SME Resilience Survey**. Based on asset value, the majority of the 400 respondents were micro enterprises – 75% – with small enterprises making up 24% and medium and large each less than 1%. It should also be noted that the survey was a targeted survey rather than a random sample across the country, focusing on urban SMEs in Aceh, Jakarta, West Java, and Yogyakarta. The survey results therefore reflect the disaster preparedness needs of Indonesian SMEs in urban areas of three localities in three disaster-prone regions. The survey indicated that both the use of Business Continuity Plans (BCP) and awareness on natural hazard risks, were low. This may be partly attributable to the fact that urban SMEs are less directly exposed to natural hazards, compared with the agricultural sector for example, but also because most survey respondents represented relatively new enterprises (53% had been in

operation less than 5 years, and a total of 80% had commenced since 2005, after the December 2004 Indian Ocean Tsunami) suggesting a lack of direct experience may have led to a lack of awareness or preparedness for future natural hazards and climate change stresses. In summary:

Each SME was requested to indicate the 3 hazards with the greatest potential to disrupt their business operations. The top 5 most mentioned hazards were: regional/global economic crises (45% listed), then in descending order, fire, theft, foreign currency fluctuations and power blackout (26% listed). Natural hazards appeared as a second tier of concern, albeit still significant, with the next 5 most mentioned hazards being accidents, flood, data loss, earthquake and drought. The dominance of economic concerns also relate to the period when the survey was done, which was late 2015, just before the end of a year during which Indonesia experienced a pronounced economic downturn. Hence, it remains important to look at their next level of concerns, assuming these will come to the fore as the economic situation improves, and bearing in mind that it was not the disaster risks that objectively decreased, but the respondents' perceptions of priorities.

A similar question on the hazards that had in fact disrupted their business operations also saw a high response for economic hazards, with 31.5% listing regional/global economic crises in their top 3, and 14% nominating foreign currency fluctuations. The hazards of flood, power blackout, thefts, fire and accidents were the second tier of experienced hazards that disrupted business (each listed in the top 3 by between 7% and 10% of respondents).

Ninety-eight percent of respondents reported they had experienced a business operation disruption, but this included economic downturn. The reported periods of stoppage were very high, with the majority of those who experienced a shutdown reporting closure of more than a month (11% more than a year); and 34% reported losses in excess of 10 million IDR (approx. USD 750). Although only 14% of SME respondents had a Business Continuity Plan (BCP), a quarter of them (25%) were in the process of developing one. For those who had not prepared a BCP, the main reasons given were that they had not heard of BCP, or they lacked the information or human resources to prepare one. For those who had prepared one, their main motivations were to avoid economic loss, to protect employees, to gain clients' confidence, and fear of not being able to meet supply or service commitments.

There is a need for SME awareness and training on both natural hazard risk and BCP:

- > 90% of the respondents had not attended any training related to BCP;
- > 91% of the respondents had not participated in any training related to disaster risk management;
- The top 5 incentives towards greater disaster resilience that were identified by respondents as something the government could provide to SMEs were: provision of technical assistance, consultancy services, or training in BCP preparation and disaster preparedness; subsidies, grants, and soft loans for disaster preparedness; tax credits, deductions, and exemptions for having BCP; certification schemes; and awards and recognition for disaster resilient SMEs.

Part 4 and **Part 5** of the report overview the laws, policies and institutions underpinning disaster and climate risk management and SME development and promotion. Part 4 looks at the companion systems of disaster risk management (DRM), and climate change. DRM policy is under the stewardship of the National Disaster Management Agency (known by its Bahasa acronym BNPB) based on Law No. 24 of 2007 on Disaster Management (DM Law). Climate change adaptation (CCA) policy is under the joint stewardship of the Directorate General of Climate Change in the new Ministry of Forestry and Environment (MoFE)³ and the Ministry of National Development Planning (MNDP) with the National Development Planning Agency (BAPPENAS, for its title in Bahasa). CCA policy is not based on a single law, but on a series of ministerial decrees. This analysis indicates that SME and private sector needs are not considered specifically in the policy and implementation processes for DRM, although the climate change policies and plans have been widely consulted with a range of stakeholders, including the private sector and civil society. There also appears to be a need for a more formal cooperation mechanism between the DRM and CCA institutions concerning SME disaster and climate change resilience.

Part 5 then considers the system for SME promotion, support and development as business enterprises, which is under the stewardship of the Ministry of Cooperatives and SMEs (MOCSME). The analysis looks at the elements of the system established to support SME development, and the extent to which it takes account of disaster risk to SME business continuity, as well as avenues for cooperation with BNPB, MoFE, MNDP and BAPPENAS. It finds that disaster resilience is not currently a central concern in this system for SME development. The picture that emerges from Parts 4 and 5 is that the legislative and policy mandates of the DRM and CCA systems, and the SME promotion system, do not currently interact to any significant extent at either a policy or

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³ Ecosystem Marketplace news report. 10 June 2015. 'Merging Of Indonesia's Forestry And Environment Ministries Continues With Inauguration Event' http://www.ecosystemmarketplace.com/articles/merging-of-indonesia-sforestry-and-environment-ministries-continues-with-inauguration-event/

operational level. A roadmap process presents an opportunity to build greater mutal knowledge of the issues in each area of expertise, and to establish ongoing mechanisms for cooperation towards SME disaster resilience as a significant cross-cutting issue.

Part 6 uses the report's observations to propose a method of tackling an Indonesian road map for SME disaster resilience. It is not a set of recommendations, as this will be a Government-led process. Rather, it describes, issues for consideration identified throughout the report as "road map issues". It highlights the fact that SMEs and the industry bodies that represent them need to be seen as the key stakeholders, even though the Government has the central role in determining the legal and policy framework and managing the process. In engaging with SMEs during the road map process it may also be important to conduct specific consultations to ensure views and information are obtained from different industries, a range of provinces and geographical risk profiles, urban and rural settings, and women SME owners. The process itself could also be used to strengthen SME organizations as part of an ongoing mechanism for capacity building, policy implementation and communication between SMEs and Government.

Although it is presumed that MoCSME would lead a roadmap process, the roles of BNPB, MoFE, MNDP and BAPPENAS are also identified as central to supporting SME resilience to disasters and climate change, along with the financial institutions that support SME general development as well as insurance and other risk financing, and private sector organizations such as the Chamber of Commerce, KADIN, and the Employers' Association, APINDO. Engagement of INGOs, development partners, experts and technical institutions already working on SME support in Indonesia can also add to Indonesia's capacity to design and implement effective support programs, given the innovative approaches already demonstrated. The roadmap process in fact provides an opportunity to institutionalize stronger cooperation between all these government agencies and other stakeholders in supporting SME disaster resilience.

Introduction

This report is a strategic policy analysis of the enabling framework for disaster-resilient small and medium enterprises (SMEs) in Indonesia, which also includes the results of a 2015 SME Resilience Survey undertaken as part of the same project.

The report takes into account relevant laws, policies, and government institutional frameworks of Indonesia, as well as private sector and NGO initiatives that interact with government policy. The focus is on SME business continuity and resilience in the face of the major natural hazards that cause disasters in Indonesia - especially forest fires, earthquakes and tsunamis, floods, volcanoes, droughts, landslides, and typhoons - including a projected worsening of the weather hazards due to climate change, which will also lead to a rise in sea level. However, the report adopts a multi-hazard approach that encompasses technological and social/economic hazards to the extent these are identified as risks for SME business continuity.

The approach recognizes the importance of general or economic resilience of SMEs and the policies to support this, as the underlying economics affecting SME profitability and development also impact their disaster resilience. For example, SMEs need access to financing for basic business development in

normal times. They may also need access to disaster risk financing to cope with devastating disaster losses, but risk financing alone will not ensure their long-term business continuity. Many aspects of SME disaster resilience are an interaction between the underlying economic health of the enterprise, and measures taken to reduce disaster risk and manage disaster shocks. This brings together two policy pillars that are present in Indonesia, and indeed in most other ASEAN countries, but which rarely interact. The first is the policy framework to develop and promote SMEs as business enterprises. The second is the national framework for 'disaster management' (the preferred term in Indonesia, although the legal framework provides for comprehensive disaster risk management) as well as climate change adaptation (CCA), which is referred to as the DRM/CCA system.

The purpose of the report is to identify the main disaster risks for SMEs in Indonesia, to report on the SME Resilience Survey findings, and then consider aspects of the enabling environment for SME disaster resilience that are working well, areas that could be enhanced through stronger policy support or resources, and new approaches that might be considered as part of an Indonesian road map for SME disaster resilience. It is based on:

- > desk research on laws, policies and secondary resources
- > an SME survey undertaken by ADPC and partners in Indonesia in late 2015; and
- > a country mission by the international consultant in January 2016 that included discussions with partners and stakeholders, and a Workshop on Disaster Resilience and SMEs in Indonesia.

This report is just one part of a government and stakeholder process towards developing a roadmap for increasing Indonesian SMEs' resilience to disasters. It is also part of a much broader regional project being implemented by the iPrepare Business facility, called "Strengthening the Disaster Resilience of Small and Medium Enterprises in Asia Project," (the Regional Project), which includes Indonesia, the Philippines, Thailand, and Indonesia. The project aims to build disaster-resilient enterprises by: 1) identifying actions to strengthen resilience of SMEs; 2) providing technical assistance in strengthening resilience to selected SMEs on a demand-driven basis; 3) supporting governments in strengthening the enabling environment that promotes risksensitive and informed investments by SMEs; and 4) facilitating knowledge sharing at the regional level.

A key component of the regional project has been an SME survey in each project country of SME perception of risk, disaster experience, preparedness for likely hazard events, and business continuity planning for disaster risk reduction and recovery. The learning from the country policy analyses and SME surveys was shared in a regional forum in April 2016, which now feeds into national roadmap processes for SME disaster resilience in each project country. Finally, a project synthesis report later in 2016 will bring together the project findings as a regional resource.

In Indonesia, the iPrepare Business facility is working with government partner, the Ministry of Cooperatives and SMEs (MoCSME).

The Regional Project is supported by the Asian Development Bank (ADB) Integrated Disaster Risk Management Fund (IDRM Fund), which in turn is financed by the Government of Canada, and the German Ministry for Economic Development and Cooperation (BMZ) through the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) within the framework of the Global Initiative on Disaster Risk Management (GIDRM).

Towards Disaster-Resilient SMEs

MEs play a vital role in all the ASEAN economies, making up the vast majority of enterprises (between 88.8 and 99.9 percent), and contributing significantly to national employment (between 51.7 and 97.2 percent), across all economic sectors and in both rural and urban areas.⁴ They also provide significant economic opportunities for women and vouth, and account for a substantial slice of GDP, between about 30-35 percent on average.⁵ In contrast to their numbers and share of employment, however, their share of total exports remains small, at between 10.0 and 29.9 percent,⁶ and they have thus been identified as requiring additional

support for development and promotion. Regional policy support for SMEs through APEC, ASEAN and other organizations will be considered in a regional project synthesis report to be completed later in 2016.

In addition to purely economic and business challenges, SMEs in Southeast Asia also face business disruption, economic loss and sometimes complete closure as a result of the impacts of natural hazards, such as floods and storms. In countries such as Indonesia, which has many islands and long coastlines where much economic activity occurs, the threat of sea-level rise due to climate change is also a very real one that needs to be addressed well in advance. Hence this report aims to identify some of the best ways to support Indonesia's SMEs to become more disaster resilient, to both sudden-onset events such as floods and storms, as well as slow-onset stresses such as drought (a temporary situation) and sea-level rise (a permanent change).

⁴ ASEAN. 2015. "ASEAN Strategic Action Plan for SME Development 2016-2025". P.1. (In fact these ASEAN figures refer to Micro, Small and Medium Enterprises (MSMEs) – but for these purposes MSMEs are equated with SMEs.)

⁵ Narjoko, Dionisius. 2014. "Turning Dream Into Reality? Achieving the Goal of Small and Medium Enterprise Development in ASEAN Economic Community." Taipei: Economic Research Institute for ASEAN and East Asia.

⁶ ASEAN. 2015. "ASEAN Strategic Action Plan for SME Development 2016-2025". P.1.

What is disaster resilience?

The concept of resilience is used extensively in this report and deserves a brief explanation. A useful definition is that resilience is:

The ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions.⁷

A disaster-resilient enterprise is therefore one that has the capacity to anticipate, resist or absorb, and then accommodate or recover from a hazard that affects it, returning to at least the equivalent state of economic health that it enjoyed beforehand, and continuing to grow and develop without detrimental long-term effects. Obviously this includes not suffering such huge losses that the enterprise ceases operation, but it also relates to smaller shocks and stresses that can affect the long-term viability and growth of an enterprise. But the fact that this definition talks about systems and their component parts is also a reminder that SMEs are not simply a number of independent entities; they are part of international, national and local systems of commerce and trade, finance and insurance that are governed by laws, policies and institutions. Therefore their resilience is partly determined by their own capacities and partly by the business environment in which they work.

It should also be noted that although the word 'disaster' is widely used to refer to large-scale natural hazards, when used in the context of disaster risk management, it refers not to the hazards themselves, but to the effect that they have on communities, including SMEs. A widely accepted definition of disaster is: A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.⁸

Thus, the disaster risk of SMEs is partly determined by their actual exposure to natural hazards, and partly by their capacity to reduce the risks through taking preventive action and developing better coping capacities. So a key part of becoming disaster-resilient is the idea of disaster risk reduction (DRR),⁹ as resilience includes the ability to anticipate and prepare for foreseeable hazards so that they do not become disasters. It includes actions to prevent hazards occurring where possible, to reduce physical exposure to them based on business location, and to reduce vulnerability by taking protective and preventive measures to mitigate the effects of hazards. It also means having the capacity to cope with disasters when they occur, through preparedness and effective emergency response, including contingency plans, as well as access to post-disaster mechanisms to support full recovery. Thus, disaster-resilience for SMEs is not just about how they respond to hazards and recover from disasters, it is also about SMEs assessing their underlying disaster risks and reducing them to an acceptable level, as part of business continuity management (BCM).

The aim of the regional project is to address, so far as possible, the full range of physical hazards and their consequences that SMEs are likely to face, and which may affect their development, profitability or survival.

The terms 'hazard' and 'disaster' are not generally restricted to natural phenomena and their effects. Hence, the above definition of disasters also

⁷ IPCC. 2012: "Glossary of terms. In: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation." Available at http://www.ipcc.ch/pdf/specialreports/srex/SREX-Annex_Glossary.pdf

⁸ The following terms are defined according to UNISDR Terminology 2009, available at http://www.unisdr.org/we/ inform/terminology: disaster risk reduction, emergency response, exposure, mitigation, preparedness, recovery, vulnerability.

⁹ The italicized words in this paragraph are commonly used terms in the field of DRM. Definitions are found in the UNISDR Terminology 2009 (undergoing review from August 2015), at http://www.unisdr.org/we/inform/terminology.

encompasses technological or human-made hazards, especially as these often compound the effects of natural events to create mixed hazards that result in worse disasters. For example, flooding may result in the spread of dangerous pollutants if industrial or agricultural premises have not adequately protected chemical supplies from floodwaters. It is also noted that, although the Indonesia's Law Number 24 of 2007 on Disaster Management uses the term 'disaster management', the content of the law in fact covers the full range of what is now more commonly described as disaster risk management (DRM), as it in fact includes predisaster efforts in DRR and mitigation, as well as disaster preparedness and emergency response, rehabilitation and recovery. It is therefore described as establishing the 'DRM system'.

Analysis of SME disaster risk also needs to consider the extent to which potential long-term changes in disaster risk as a consequence of climate change are taken into account, both by SMEs themselves and by government policies intended to support SME resilience and development. Thus, the terms 'disaster risk' and 'climate and disaster risk' are both used in this report to describe the natural and human-made hazards that SMEs need to consider, while noting that climate risk alone does not describe all relevant natural hazards (e.g. earthquakes).

Characterizing SME disaster risk in the policy context

The underlying question of this report is how policy interventions can promote and support SMEs to attain disaster resilience. In this regard it is therefore helpful to divide the disaster risks faced by SMEs into two broad categories: (1) shared community disaster risks and (2) business continuity disaster risks.

1. Shared community disaster risks

SMEs, even more so than large enterprises, are physically embedded in urban and rural communities (although some are now part of industrial estates and special economic zones). This means that their exposure to natural and other large-scale local hazards is, by and large, the same as that of the communities in which they operate. Thus, many aspects of promoting disaster resilience for SMEs can be done through the same policy tools as are used for the general population. The main such tools are the national and local DRM system, known in Indonesia as 'disaster management', made up of the laws, policies and institutions addressing disaster risk management. In this report the system of decrees, policies and institutions addressing climate change adaptation is also considered a part of the system of risk management against natural hazards, albeit in this case permanent changes to which SMEs, their communities and government frameworks need to adapt.

As will be seen, SMEs in Indonesia tend to be micro and small enterprises that are very much part of their local communities. Owners and employees therefore need to be aware of the hazards in their locality and how to reduce their risk from them. This may include SME participation in local disaster risk assessments, community based disaster risk reduction programmes, or public awareness campaigns on local risks that are targeted to or inclusive of SMEs. SMEs may need to participate actively in early warnings systems, or opt in to a system to ensure they receive such warnings.

In addition to the major climatic hazards of flood and storm, disaster preparation for SMEs in Indonesia also needs to include fire (urban and forest wildfires, including the effects of smoke haze), as well as earthquake, tsunami, and volcanic eruptions in relevant districts, and to include emergency drills for all relevant hazards in their location as necessary to ensure employees' safety. Preparation may also need to include contingency plans to move stock and/or plant and equipment to a safe location in the event of flood or typhoon warnings. Longer term strategies may also need to include adaptation to increased drought, and to sea level rise in coastal areas, river deltas, and small islands, especially for SMEs in agriculture, fishing and tourism.

Many of these are the same measures as are needed for the surrounding community, and micro enterprises operating in community hubs may be well served by broad community based disaster risk management (CBDRM), or community based disaster risk reduction (CBDRR). However, small and medium enterprises, especially those situated outside settlements, may not always be regarded as part of the 'community' for such purposes, and yet may also not be part of industry organizations that focus on larger enterprises. It cannot be assumed that SMEs have access to the relevant information or expertise on disaster risk reduction and emergency response, so efforts may need to be made to include them in community level risk reduction, preparedness, response and recovery. This was one of the key questions tackled in the SME Resilience Survey, discussed in Part 3.

2. Business continuity disaster risks

In addition to shared community disaster risks, SMEs may have particular vulnerabilities due to their industrial sector, type of activities or enterprise characteristics, as well as the nature of their supply chains and markets.¹⁰ These can be described as business continuity disaster risks. For example, the agricultural sector can suffer losses due to drought, late arrival of the monsoon, or crop pests, which have little effect on the communities where they are based. Small retail businesses may lose uninsured stock due to floods or fires, an economic impact lasting well beyond the hazard itself, or they could face loss of business due to prolonged power cuts caused by emergencies elsewhere (or simply problems in the power infrastructure that are often experienced in Indonesia). Many businesses may face major disruptions if road access is blocked or roads washed away, affecting their ability to receive supplies and take produce or merchandise to markets; and in manufacturing they may have difficulty obtaining raw materials or parts if their own suppliers are devastated by a disaster.

The very fact of being business enterprises makes SMEs vulnerable to different types of economic loss and damage, even from hazards that also affect their local communities. Not only do they risk losing goods and assets, as do residents, but both owners and employees face the risk of short or long term loss of employment/income if a disaster seriously disrupts their ability to operate in their normal premises (e.g. due to flooding or blocked physical access, loss of communications, disrupted water or electricity supply), or if it negatively impacts their supply chains, distribution or service networks, or demand for their goods or services in a disasteraffected area. Loss of SMEs from a community following a disaster also impacts livelihoods and prosperity in the wider community.

These business continuity disaster risks arise from the same types of hazard as shared community risks, but they are not necessarily restricted to the immediate locality, and they are also caused by human-made hazards and disruptions (described in the DM Law as 'non-natural' or 'social' hazards). Hazards that cause disasters in other areas can also affect SME supply chains or distribution networks. Preparation for such eventualities requires a more business-oriented approach to risk assessment and contingency planning.

Policy approaches to support resilience through business continuity management are likely to be the most effective for disaster risks related to the particular disaster vulnerabilities of business activities, in particular supply chain issues. For this reason the policy tools used to encourage SME development and to support their broader economic resilience may be the best starting points to support SME business continuity management (BCM) and especially the development and implementation of business continuity plans (BCP) that enhance disaster resilience. In Indonesia, the key legal framework for this effort is Law No. 20 of 2008 on Small and Medium Enterprises, which created the mandate for MoCSME to support SMEs through capacity building. The law is focused on

¹⁰ There are now many resources available on these questions. Starting points include two special journal editions: ADPC. 2014. "Engaging the Private Sector in Disaster Risk Reduction", Special Edition, Asian Disaster Management News, June 2014. P 52-54. Bangkok, Thailand: ADPC; and APEC-ACMC (SME Crisis Management Center). 2014. APEC SME Monitor, Issue 16, June 2014. Taipei, Taiwan: APEC-SCMC [special edition on MSE business continuity planning in the face of disasters].

creating a favorable business environment for SMEs through national and local government and business and community efforts.¹) This SME support system is aimed at business support, and also potentially has access to multiple entry points to access SMEs to support their disaster-resilience (for example, information on disaster risk and incentives to become resilient can be provided through mechanisms for business registration, taxation, standards compliance, BCM/BCP training, and general business training.) However, while such frameworks focus on SME economic wellbeing, they can sometimes fail to take account of SME economic losses from disasters, or the reasons for such losses, including the extent to which these are preventable through DRR, contingency planning and disaster recovery support.

This categorization of SME risks leads to two guiding questions for the Indonesia country policy analysis, due to the possibility that SME disaster resilience may fall between two pillars:

- 1. To what extent do the climate change adaptation (CCA) and disaster management (DRM) systems either include SME representatives at national level, or integrate SMEs into local institutions, risk awareness campaigns, emergency response and recovery operations at local level?
- 2. To what extent is climate and disaster resilience factored into the picture of an economically healthy SME through policy schemes targeted at SME development and promotion?

¹¹ As discussed in Part 5.

SMEs in Indonesia - characteristics and risks

How SMEs are defined

The legal definition of SMEs is provided in Law No. 20 of 2008 on Small and Medium Enterprises. An SME is a productive entity owned by an individual or individual business unit, excluding foreign-owned or foreign-invested firms, and is defined by both assets (excluding land and buildings) and annual sales, as set out in Figure 1. For government policy purposes, this single definition has replaced a range of different methods of categorization by different agencies, paving the way for greater policy consistency.¹²The same definition of small and medium is now also used for taxation purposes,¹³ although capital markets use a different definition.⁴ Unlike SME definitions in many other countries, it does not include any measure of number of employees.

SMEs in Indonesia's Economy

By the end of 2013 there were an estimated 57.9 million micro small and medium enterprises operating in Indonesia, which was 99.9% of all enterprises. The SME sector is also an increasing part of the Indonesian economy, growing in numbers at more than 2% per year, and not seriously damaged by the 2008/09 Global Financial Crisis (GFC). Figure 2 shows that their numbers almost tripled in the 7-year period from 2007 to 2013.¹⁵

¹² Machmud, T. M. Z. and R. N. Siregar (2010), "Small and Medium Enterprises in Regional Production Networks: An Indonesian Case", in Vo, T. T., D. Narjoko and S. Oum (eds.), Integrating Small and Medium Enterprises (SMEs) into the More Integrate East Asia. ERIA Research Project Report 2009-8, Jakarta: ERIA. pp.334-373, at 336.

¹³ Mourougane, Annabelle. 2012. "Promoting SME Development In Indonesia." OECD Economics Department Working Papers No. 995. Paris: OECD. P.6.

¹⁴ ADB. 2015. Asia SME Finance Monitor 2014. P.174.

¹⁵ ADB. 2015. P.169. Citing MoCSME most recent data by industry sector 2011.

Figure 1 Definition of SMEs under Law No. 20 of 2008

Enterprise size	Value in IDR of Assets (excluding land and buildings) OR Total annual sales	Approx. Value USD March 2016
Micro	Assets less than 50 million OR Sales less than 300 million	Assets less than 3,740 OR Sales less than 22,440
Small	Assets 50-500 million OR Sales 300 million – 2.5 billion	Assets 3,740 to 37,400 OR Sales 22,440 to 187,000
Medium	Assets 500 million – 10 billion OR Sales 2.5 – 50 billion	Assets 37,400 to 747,999 OR Sales 187,000 to 3.74 million



Figure 2 Number of SMEs in Indonesia 2007-2013

Source: Table adapted from ADB 2015 SME Finance Monitor 2014, based on MoCSME data.

Government figures for SMEs in Indonesia are currently based on estimates obtained from a range of institutions, especially local governments, which have the primary responsibility for SMEs. This is because SMEs are not obliged to register when they start a business, so almost all of them are informal.

In 2015 the Indonesian Government launched a special business license for SMEs, called the *Izin Usaha Mikro dan Kecil* (IUMK), which will help with statistical collection and targeting of policy interventions. The license records: the name of owner, address, phone number, type of business, and location. In the certificate of the license, there is also stated the business' capital and equipment. This is a new scheme and so far the IUMK data has not been published. The central place of SMEs in the national economy is even more apparent when considering that they account for 60.3% of GDP and 97% of the total workforce.¹⁶

Some indication of the percentages of SMEs by individual sector is given by looking at loan disbursements by banks, as set out in Figure 3. This shows that the majority of loans are disbursed to SMEs in the trade, hotel and restaurant sector (57%). Manufacturing accounts for the next largest group of loans (10%), with agriculture, forestry, fishing accounting for a similar number (9%). The remaining three significant sectors are: financial, ownership and business services (7%); services 7%); and construction (6%).

¹⁶ ADB. 2015. P.169.



Figure 3 Percentage of Loans to SMEs in 2015 based on industrial origin

Source: Bank Indonesia

Loan data, however, presumes that SMEs in different industry sectors have similar borrowing patterns, which may not be the case. For example, other figures for aggregated industry sectors indicate that almost half of SMEs (48.8%) are in the agricultural sector (including forestry, and fishing industries), while more than a guarter (28%) are in the combined wholesale and retail trade, and hotel and restaurant sectors, proportions which have been stable for a long time.⁷⁷ These proportions are reversed in the loans data, so comparing these two data sets suggests that the agricultural sector may not borrow as much as the trade, hotel and restaurant sector, which in turn could relate to their size and access to financing. In the case of the agricultural sector, other data indicates that this is where micro enterprises are concentrated, while small firms dominate in the trade and hotel sector, and there are very few medium-sized firms at all (the "missing middle" in the production structure common in Southeast Asia).¹⁸

Clearly there is a need for good national data by enterprise, including size classification and industry sector as a minimum. The IUMK data will gradually fill many of these gaps, as well as providing data on assets at the time of registration. If the IUMK system is also to include periodic renewal of such licenses, this would provide the opportunity to identify enterprises that have ceased functioning, and to update assets lists of continuing enterprises. Such a system could also potentially be used to conduct regular surveys of the registered enterprises, such as every five years, to collect a wider range of data as the basis for policy decisions. For example, it may be useful to collect and publish additional data, such as turnover and economic contributions by enterprise size, SME ownership by gender, age of enterprises, location, geographical risk factors from exposure to hazards, and industry sector in detail.

Most Indonesian SMEs are traditional businesses aimed at the domestic market, although some of these have formed clusters or cooperatives to create a business model aimed at exports – for example, in the handicrafts and wooden furniture industries. In 2013 SMEs accounted for 15.7% of total export values, growing 9.3% in that year, but

¹⁷ ADB. 2015. P.169.

¹⁸ Mourougane, Annabelle. 2012. "Promoting SME Development In Indonesia." OECD Economics Department Working Papers No. 995. Paris:OECD. P. 6.

Indonesian exports are highly vulnerable to global and regional economic factors. For example, the years 2009 and 2012 saw negative growth of -8.9% and -11.1% respectively for SME export value, due to the GFC and slow recovery of major trading partners in the region.¹⁹

SMEs that have the same type of business and are located near each other can form cooperatives according to Law no 25 of 1992. There are two types: primary cooperatives that consist of at least twenty persons; and secondary cooperatives that consist of at least three cooperatives. Thus cooperatives can provide support and marketing structures for micro and small businesses, and can potentially play a key role in SME development and disaster resilience.

SME Disaster and Climate Risk in Indonesia

As a territory covering both large and small islands over a large geographical area, the level and type of disaster risks vary considerably in different parts of Indonesia. Overall, the country has a high exposure to a wide range of natural hazards, due to its tropical climate and being located on the join of three tectonic plates. The main hazards include: earthquake and tsunami, volcanic eruptions, floods driven by annual monsoonal rains, landslides, coastal storms (typhoons are rare), drought, as well as human-made hazards that include forest fires, communicable and infectious diseases, civil unrest,²⁰ and power blackouts.

Some large-scale disasters that have affected the country were: the 2004 Indian Ocean earthquake and tsunami, which especially impacted Aceh, causing 155,000 deaths, affecting 532,898 people, and causing economic losses estimated at USD 4.5 billion; the 2006 Yogyakarta / Western Java earthquake, causing 5,778 fatalities and economic losses estimated at USD 3.5 billion;²¹ and the eruption of volcano Merapi, near Yogyakarta, in 2010 which caused more than 300 deaths and displaced more than 300,000 people.²² However, although earthquakes are the main cause of single catastrophic events, and result in very high human costs in deaths and injuries, floods are the most regular and widespread hazard affecting Indonesia, with almost every part of the territory sustaining flood-related damage annually. For example, between 1995 and 2015, floods accounted for 43 percent of major disaster occurrences, double the number caused by earthquakes. Floods also affected the second greatest number of people over the same period (after earthquakes) and accounted for almost the same total damage as that caused by earthquakes and forest fires combined.²³ During February and March 2016 alone, late and intense monsoonal rains caused devastating floods and landslides in many parts of East and West Java, including Jakarta, Padang, and the Citarum River in Bandung (affecting 15 districts in West Java), resulting in evacuations and damage to thousands of homes and businesses.²⁴ Floods should therefore be of particular concern for SME disaster resilience throughout most of Indonesia, as the incremental effects of regular losses and disruptions can affect their long tem viability, and many such losses can be avoided through disaster risk reduction measures and timely and effective response to early warnings.

A set of 2011 World Bank estimates put the annual expected losses to Indonesia from disasters at between USD 423 and 554 million per year.²⁵ Clearly disasters have a major negative impact on Indonesia's economic development, and of course on SMEs as the backbone of the economy.

¹⁹ ADB. 2015. P.170.

²⁰ CE-DMHA. 2015. "Indonesia: Disaster Management Reference Handbook." Hawaii:US DoD. Pp 24-39.

²¹ World Bank and GFDRR. 2011. Indonesia: Advancing a National Disaster Risk Financing Strategy – Options for Consideration. P.12 (economic losses); CE -DMHA. 2015. Pp. 24-25 (deaths and affected persons).

²² Brookings, LSE. 2014. A Year Of Living Dangerously: A Review Of Natural Disasters In 2010. The Brookings Institution – London School of Economics Project on Internal Displacement. P. 53.

²³ CE-DMHA. 2015. P. 34. This analysis uses the EM-DAT criteria of disaster, which is 10 or more people reported killed, 100 or more people affected, and either a call for international assistance, or a declaration of a state of emergency.

²⁴ Floodlist, Indonesia : http://floodlist.com/tag/indonesia.

²⁵ World Bank and GFDRR. 2011. P. 23.

As yet, the likely economic impact of climate change cannot be calculated with any accuracy, but climate change projections indicate a need for considerable adaptation within Indonesia. The main impacts of climate change will be more extended dry seasons, floods, and more extreme climate events. The largest threats for Indonesia are the changes in the intensity and pattern of rainfall, the increase in sea surface temperature and sea level rise. All of these are likely to impact community health and livelihoods, biodiversity and economic stability.²⁶ Awareness of climate change projections and associated risk factors for their business type and locality is therefore an important part of medium to long-term business continuity management (BCM) for SMEs, (especially for agriculture, fishing and tourism in coastal areas), as well resilience to more regular and more extreme climatic hazards, especially flooding (which directly affects urban and rural SMEs) and drought (which affects agriculture directly, then the local rural community SMEs and the urban SME wholesalers and retailers of agricultural produce).

SMEs in Indonesia are overwhelmingly micro and small, and as the sector is also dominated by the agricultural and retail sectors rather than manufacturing, they tend not to be based in separate industrial parks or zones, or even highly urbanized areas, and are distributed across the territory. As such, they largely share the surrounding community's physical exposure to hazards and the same immediate dangers to personnel. So although they have additional business continuity risks from disasters, these shared community disaster risks need to play a significant role in their risk assessments for BCM. These risks are based on exposure by location or geographical area, on the vulnerability and coping strategies of the individual enterprise (e.g. level of knowledge and preparedness, physical structures), and the effectiveness of the community's efforts in disaster risk reduction, preparedness, and emergency response, which can all reduce damage and loss. SME strategies for managing disaster risk should therefore place an emphasis on engagement with and understanding of the local DRM system, as well as enterprise-level BCM.

Retail and service sector enterprises, by their nature, tend to be embedded within their communities, and primarily serve local clients. For many of them, their immediate disaster risk will also be very localized, or shared community disaster risks, in addition to supply chain issues and customer access.

SMEs in manufacturing, retail and wholesale trade, are also likely to be affected significantly by supply chain and distribution blockages originating from disasters in both their own and other areas, including foreign suppliers. Similarly, for those in the tourist service sector, tourists may be unable to access their facilities due to travel restrictions or breakdown in services as a consequence of a disaster in another other locality. These are specific vulnerabilities in business continuity that can affect enterprises reliant on remote supply chain and distribution networks, including export markets, and/or on movement of clients from other countries or other parts of Indonesia. Of course local supply and distribution networks are also disrupted by local disasters, so all these threats to business continuity need to be part of BCM and other contingency planning.

As the geographical location of an SME will often determine its initial hazard risk (exposure), adequate BCM needs to be underpinned by local risk knowledge, often collected through risk mapping as part of DRM systems and land use or development planning processes. National statistics on SME locations can potentially be matched with national and local risk mapping data, to indicate priority areas for capacity building and BCM initiatives for SME disaster resilience, if this data is available. Such risk analysis is part of the DM Law in Indonesia for new developments, and is part of the broader responsibilities of both local government authorities and local branches of BNPB under that law. Likewise, part of the government mandate on CCA is the integration of climate risk assessments into development planning. Both of these mandates are discussed in Part 4.

²⁶ Indonesia, MNDP/ BAPPENAS. 2012. Indonesia National Adaptation Action Plan on Climate Change (RAN-API), Synthesis Report.

How disaster-resilient are SMEs? – The SME Survey

The purpose of the SME Survey was to investigate the disaster experiences of Indonesian SMEs, and their readiness to deal with disasters. It aimed to identify what kinds of hazards SMEs consider to pose the greatest risk, including economic risk, natural hazard or technological hazard, and what has been their experience of disasters. It also aimed to gauge the level of knowledge and understanding of SMEs about DRM and business continuity plans (BCPs), as the basis for identifying what types of support can help them to become more disaster resilient.

Two factors that make representative surveying of SMEs in Indonesia challenging, are (1) they are dispersed throughout the territory, many in rural areas where making contact for surveying is difficult, and (2) there is a great deal of variation in the types of disaster risk between different localities. The SME Survey of 400 respondents focused on SMEs in urban areas of Indonesia that have experienced disasters from natural hazards. These were: DKI Jakarta and surrounding areas (Bogor, Depok, Tangerang, Bekasi), which often experience flooding; Yogyakarta, which experienced the eruption of volcano Merapi in 2010, and prior to that the major earthquake in 2006; and Aceh, which suffered massive losses from the Indian Ocean earthquake and tsunami in 2004. The survey results therefore reflect the disaster risk awareness, disaster preparedness and support needs for greater disaster resilience of Indonesian SMEs in three disaster-prone urban localities.

The project's SME Survey results are also supplemented at some points by results from a quantitative mobile phone-based survey of 2,121 respondents undertaken by Oxfam in Indonesia in 2015, part of a scoping

Figure 4 Respondents business sector distribution

No	Business Sector	Percentage
1	Agriculture, forestry, and fishery	6%
2	Mining and quarrying	0%
3	Manufacturing	1%
4	Automotive	1%
5	Construction	0%
6	Wholesale and retail trade	39%
7	Transportation and storage (logistics)	0%
8	Accommodation service activities (hotel, lodge, boarding house)	1%
9	Food service activities	8%
10	Tourism	1%
11	Information and communication	1%
12	Financial and insurance activities	0%
13	Real estate activities	1%
14	Others	42%

study on SME resilience.²⁷ The Oxfam survey was also conducted in particular areas experiencing disasters: Yogyakarta (experiencing earthquake, volcanic eruption, drought), Padang Pariaman and Agam district-West Sumatra province (earthquake, flash-floods, floods, fire, landslide), Karo district-North Sumatra province, (volcanic eruption, floods, fire), Kediri district-East Java (volcanic eruption, floods).

The survey group

While Annex 1 provides more detail on methodology, it is worth noting some of the survey group characteristics at this point in order to understand how the survey results relate to SME policy. Based on asset value alone, the majority of the 400 respondents were micro enterprises (75%), with small enterprises making up 24% and medium and large each less than 1%. In addition, 80% of them had fewer than 5 employees.

They were distributed across a range of business sectors, although it is noted that the proportion from the agricultural sector, at 8%, is much lower than the proportion of SMEs in that sector nationally (48.8%), a consequence of the urban-based sample. Likewise, the proportion of those engaged in wholesale and retail, tourism, accommodation and food service activities is proportionally higher, at 49% (compared with the national proportion of 28%). The SME respondents also demonstrated a high level of gender balance in ownership of the enterprises, with 52% owned by men and 48% by women. This is broadly consistent with the overall gender balance in self-employment in Indonesia, whereby 68.3% of women in the workforce and 65.6% of men are classified as

²⁷ Oxfam. 2015. "Scoping Study Report Small Medium Enterprises Resilience (SMEs Resilience), in Indonesia." Jakarta: Rights in Crisis Division, Oxfam in Indonesia (Unpublished report kindly provided by Oxfam).

self-employed, reflecting the large proportion of micro enterprises.²⁸

Most of the enterprises in the sample had commenced operation relatively recently, with 53% having been in operation less than 5 years (See Annex Figure A4). In the context of other major disaster experience in Indonesia, 53% of respondents had thus begun operating since the Merapi volcanic eruptions near Yogyakarta in 2010, while 80% had started after the December 2004 Indian Ocean earthquake and tsunami. So in one sense, their level of disaster resilience and disaster risk awareness is a measure of how well the lessons learned from those previous experiences have become part of the culture and passed down to the new generation of urban business entrepreneurs. However, floods in Jakarta are almost an annual occurrence and were extensive in both January 2014 and January 2015, so at least part of the survey group could be expected to have had direct experience of floods.

Findings on Risk Exposure and Impacts of Previous Disasters

The survey asked respondents about the hazards they think are likely to disrupt their business, and the hazards they have experienced in the past that did disrupt their business.²⁹

Perception of hazards that will potentially disrupt operations

The question, 'What are the Top 3 hazards have the potential to disrupt your business operations?' produced some surprising results. Figure 5 shows the percentage of respondents that chose each hazard as one of their top three, and it shows that the five hazards perceived as most likely to disrupt their business activities were: economic crisis (48%), fire (43%), theft (35%), foreign currency fluctuations (27%), power blackout (26%), and flood (15%), with earthquake and drought lower in the list and nominated by only 8% and 7% of respondents in their top three.

This is a somewhat surprising result given that all respondents were operating in areas with high exposure to natural hazards, and with a fairly recent history of disasters. It may be partly explained by the urban-based sample and the types of industries represented, especially the absence of the agricultural sector which experiences greater disruption from climatic events such as floods. Alternatively the dominance of economic concerns could simply reflect the economic situation at the time of the survey, which was done late 2015 after a year in which Indonesia experienced a pronounced economic downturn (increased inflation, decreased foreign trade, and currency depreciation). Hence, it remains important to also look at respondents' next level of concern, assuming these will come to the fore as the economic situation improves. However, another valid interpretation is that these urbanbased entrepreneurs do not give sufficient weight to disaster risk because they have not experienced disasters personally since commencing business, and are not well enough informed of the risks, even though they are based in hazard-prone areas.

Looking at the natural hazards only, the top three were flood, earthquake and drought, which do align with the major risks in Indonesia. However, these results also need to be compared with the actual hazards experienced.

Experience of business disruption due to hazards

Ninety-eight percent of respondents said they had experienced a business disruption, although this included economic disruption. When asked the year of the last major disruption to their business operations, 28% of respondents nominated 2015 and 40% indicated 2014, with 2013 nominated by 7% and 2010 by 5% (all other years since 1994 were nominated be 3% or fewer as the most recent year of disruption). The fact that 68% nominated the two most recent calendar years as the most recent year of disruption suggests that disruptions are frequent, although it should be noted that this may refer mainly to economic disruption in these years.

²⁸ World Bank, Gender Data Portal, Indonesia. 2014 data: http:// datatopics.worldbank.org/gender/country/indonesia

²⁹ The percentage is calculated by dividing the number of respondents by 400 (number of total respondents).

Respondents were then asked what hazard caused the major disruption, as summarized in Figure 6. This indicates that respondents' dominant concerns about the potential for economic disruptions are based in their own experience, with 31.5% nominating regional or global economic crises, and 14% nominating foreign currency fluctuations as the major cause of actual disruptions. Again, to a degree this likely reflects the year of economic downturn at the time of

Figure 5 Perception of hazards that will potentially disrupt operations²⁹



the survey and the urban sample and industry distribution of respondents. However, floods were nominated by 9.5%, reflecting their impacts in urban areas such as Jakarta.

Some further light can be shed on the project SME Survey results by the Oxfam Indonesia Survey done in June 2015, which was a brief quantitative survey of SMEs done using mobile phones over a one week period, but had a large number of

Figure 6 Respondents' experience of major disruptions



Figure 7 Number of days stoppage due to the disruption (123 respondents)

Stop business operation	Percentage
Operations not stopped	9%
less than 7 days	12%
7-30 days	23%
31 days - 365 days	45%
31 days - 365 days	11%

Figure 8 Estimated Cost of Damages Caused by the disruption (200 respondents)

Estimated cost (in rupiahs)	Percentage
Less than 1 million	13%
1 – 5 milions	26%
5 - 10 millions	19%
more than 10 millions	34%
the sales decrease 10-30%	6%
the sales decrease more than 30%	4%
Total	100%

respondents (2,121 SMEs over 5 provinces). The interviewers sampled micro, small, and medium business in the areas heavily affected by disaster. The survey group was then stratified based on the severity of impact of disaster experienced by the respondents: heavily impacted and moderately impacted. This survey did not include economic impacts but only natural hazards (including volcanic eruption, earthquake, floods, tsunami) and fire (usually caused by human activity). Only 3 of the 2,121 SMEs reported no disaster impacts, and just over half reported being affected by multiple disasters rather than single ones. In that survey, 69% reported a business disruption due to disaster; 63% reported moderate disaster impact while 37% reported heavy disaster impact (at any time during their business experience, not limited to a particular timeframe). These Oxfam Survey results suggests that most of the iPrepare Business facility project SME Survey respondents are also likely to have experienced some degree of impact from natural hazards, but in the economic climate at the time of the survey these were not seen as the greatest causes of business disruption when compared with economic factors.

Effects of disruption

In the SME Survey the reported effects of the disruptions covered a range of issues, with the top four effects being loss of clients (28%), damage to facilities and equipment (15%), employees being unable to go to work (13%) and damage to raw materials (10%). Other effects included: suppliers were not able to deliver material/services; SMEs were unable to deliver products to markets/ customers; orders/contracts were cancelled (each of these was 7%) and damage to finished products (5%).

Figure 9 Top reasons for not preparing BCP

Reasons for not preparing BCP	Percentage
Our enterprise has not heard of BCP before	62%
Lack of information on procedure for preparing a BCP	32%
Lack of human resources to handle BCP preparation	19%
Lack of company BCP knowledge and expertise	17%
Don't know	17%
Lack of budget for preparing a BCP	15%
Management's awareness is low	15%
Difficulties coordinating within the company in preparing a BCP	10%
Employees' awareness is low	9%
No need for written BCP	5%
The expected impact of disruption is less than the cost of preparing and maintaining a BCP	3%
BCP is impractical	2%
Our enterprise is not likely to experience any disaster or disruption	1%

Degree of disruption can also be measured by days of stoppage, a question that was answered by 123 respondents. The survey indicated that the vast majority of this group (91%) of the respondent SMEs that had experienced disruptions had to cease operations for some period of time, and only 9% continued non stop. While 35% stopped for between 1 and 30 days, a 51% majority stopped for more than 31 days, including 11% who stopped operating for more than a year. These are very long stoppages, suggesting the SMEs had few resources to recover from disruptions.

Costs of damage from the disruption were also estimated by 200 of the respondents (the remainder did not answer this question). Table 7 presents the estimates (in Indonesia rupiah) of the cost of damage. Some of the respondents answered the cost by indicating a decrease in sales. For SMEs in Indonesia, the loss of more than 10 million rupiahs (approx. USD 760 at the time of writing) is very significant, bearing in mind that enterprises categorized as micro, according to the law, are those with sales of less than 100 million per year (that is approx. USD 7,620).

The Oxfam Survey, although based on different questions, presents a picture consistent with this image of SME disaster losses, as their respondents reported damage from loss of assets and inability of owners and labor to work as a result of the disaster. The reported effects on the SMEs in their survey ranged from decreased income, through business discontinuity, to bankruptcy. While 69% of the Oxfam sample reported a business disruption due to disaster, 93% also reported that they were able to recover and continue operation. They also reported long recovery periods for a substantial minority of SMEs, with 75% of those who recovered able to do so in under 6 months, but 25% taking more than 6 months. For the 7% who were not able to recover, more than two-thirds (69%) gave lack of capital as the reason, and for most of the remainder it was due to damaged assets and buildings.

Figure 10 Top reasons for developing a BCP

Reasons that motivate SMEs to develop BCP	Percentage
To avoid economic losses	55%
To protect employees	26%
To gain our clients' confidence	17%
BCP is a good business practice	16%
Fear of not being able to meet supply or service commitments if business is interrupted	16%
Don't know	13%
BCP will help us gain competitive advantage	10%
Because of a previous disaster experience	10%
Having a BCP will attract more business	9%
It is a customer's requirement	8%
An enterprise-level BCP is needed to participate in area-level BCP	6%
BCP is a symbol of reliability	3%
It is prestigious to have a BCP	2%
It is a legal or mandatory requirement	2%
An employee proposed preparation of a BCP	2%

Findings on Business Continuity Plan Adoption

Respondents were asked, "Do you have a written plan to ensure your business can survive the types of hazards and shocks you are likely to experience in your localities and type of business, commonly known as a Business Continuity Plan (BCP)?" Although only 14% of SME respondents responded that they had a written BCP, a quarter of them (25%) were in the process of developing one.

For respondents without a BCP, the reasons given for not preparing one were quite varied. However all the top listed answers related to lack of knowledge or expertise to develop a BCP, led by 62% saying they had not previously heard of BCP.

For the surveys conducted during seminars, respondents received a brief explanation about BCP, and most of them indicated in these sessions that it was the first time they had heard about BCP. For the 39% of respondents who either had a BCP or were preparing one, their reasons for doing so were also varied, as summarized in Figure 10, which lists the percentage of this group who included each motivator in their top 3 reasons. The main reason given to develop BCP was to avoid economic loss (55% listed this), but protection of employees (26%) was also very significant.

Findings on DRR and disaster preparedness

Although some SMEs have developed a disaster preparedness plan, most of them do not have a plan in written form. Figure 11 presents the types of disaster preparedness plans used by SMEs.

Figure 11 Respondents' experience of major disruptions



Figure 12 Top coping mechanisms used to deal with business disruption and emergencies





Figure 13 Top risk financing mechanisms in use

Top disaster and emergency coping mechanisms

SME mechanisms for coping with disruptions are an important aspect of their disaster resilience. Figure 12 shows that use of personal savings was the highest ranked coping mechanism to deal with disaster losses (61% listed it in their top 3 coping strategies), followed by obtaining a loan without interest, presumably from their family and friends, (34%). The next two main coping strategies were to generate more income by working more (21% listed in their top 3) and reducing expenses (19%). Hence, the respondents' coping mechanisms were very self-reliant and dependent on close connections and support from family and friends. Such mechanisms are obviously effective for micro and some very small businesses, but they could be less effective following major disasters with large losses for small and medium enterprises - especially if the entire community is affected and those support mechanism are not available because everyone has the same need.

In addition, 21% of respondents reported establishing a mutual aid agreement with another organization during and after emergencies; and 14% of respondents had participated in DRM activities organized by BNPB.

Most of the respondents (82%) also indicated they would like to participate in a national planning process to support SMEs to prepare for and recover from hazards and disasters.

Findings on financial coping mechanisms

Figure 13 shows that 43% of respondents listed 'no risk financing mechanism', while 18% said they had fire insurance, and a small 8% listed motor vehicle insurance and 7% insurance for employees. This shows a very low uptake of formal risk financing mechanisms, in the form of the most basic types of insurance cover, and then only by a minority.

Figure 14 Preferred government incentives to encourage BCP adoption



For SMEs and the Indonesian people in general, insurance is still not a legal necessity and is not widespread. The mass introduction of insurance began in 2015, when the Government implemented a health insurance program for the entire population of Indonesia – Badan Penyelenggara Jaminan Sosial (BPJS).

Findings on SME Incentives and Training Needs

Information and awareness about BCP for SMEs is an important element in developing their disaster resilience. However, the majority of respondents were not familiar with BCP, and only 10% of respondents had ever attended any training related to BCP. Likewise, with training related to disaster risk management, only 9% reported having attended relevant training.
Although the respondents were willing to develop BCP voluntarily, without the need for it to be made compulsory in law, they reported that incentives are still needed. In reply to the question what are their preferred three types of incentives that the government should provide to SMEs to encourage them to be disaster resilient, the surveyed SMEs responded as summarized in Figure 14.

Survey overview and conclusions

The survey indicated that both the use of Business Continuity Plans (BCP) and awareness on natural hazard risks, were low. This may be partly attributable to the fact that urban SMEs are less directly exposed to natural hazards, compared with the agricultural sector for example, but also because most survey respondents represented relatively young enterprises, with 53% having been in operation less than 5 years. In the context of major disaster experience in Indonesia, 80% of respondents began operating after the December 2004 Indian Ocean Earthquake and Tsunami, while a majority had begun subsequent to the 2006 Yogyakarta earthquake. This suggests that a lack of direct experience may have led to a lack of awareness or preparedness for future natural hazards and climate change stresses, even though respondents are objectively likely to face such hazards in the future, based on scientific risk assessments.

Each SME was requested to indicate the 3 hazards with the greatest potential to disrupt their business operations. The top 5 most mentioned hazards were: regional/global economic crises (45% listed), then in descending order, fire (43%) and theft (35%), foreign currency fluctuations, and power blackout (26% listed). Natural hazards appeared as a second tier of concern, albeit still significant, with the next 5 most mentioned hazards being accidents, flood, data loss, earthquake and drought. Both this result and the responses

concerning experienced disruptions indicate that for the urban SMEs in the sample, economic impacts of regional and global markets were of greater concern at the time the survey was done. This does not mean that natural and other physical hazards were not of concern, only that the most pressing worry and impact at the time was economic. A lack of awareness and concern about disaster impacts can also indicate that SMEs have not undertaken objective risk assessments about the business risks from disasters, and have not received the learning about disasters from previous experiences even in their local areas where major disaster had occurred before they began operating their businesses. This suggests a type of generation gap in disaster risk awareness, which needs to be addressed through awareness-raising and training, including multi-hazard BCP.

- A similar question on the hazards that had in fact disrupted their business operations also saw a high response for economic hazards, with 31.5% listing regional/global economic crises in their top 3, and 14% nominating foreign currency fluctuations. The hazards of flood, power blackout, thefts, fire and accidents were the second tier of experienced hazards that
 disrupted business (each listed in the top 3 by between 7 and 10% of respondents).
- > 98% of respondents reported they had experienced a business operation disruption due to a hazard or disaster, including economic downturn. The periods of stoppage were also very high, with the majority of these 123 respondents reporting shutdowns of more then a month, and 11% more than a year. Also, 34% reported losses in excess of 10 million IDR (approx. USD 750).
- SMEs use their savings, borrowing from relatives, as well as the help of others when experiencing disasters and disruptions in business. Therefore, financial management and asset portfolio in order to cope with business risks is very important to address.

Although only 14% of SME respondents had a Business Continuity Plan (BCP), a quarter of them (25%) were in the process of developing one. For those who had not prepared a BCP, the main reasons given were that they had not heard of BCP, or they lacked the information or human resources to prepare one. For those who had prepared one, their main motivations were to avoid economic loss, to protect employees, to gain clients' confidence, and fear of not being able to meet supply or service commitments.

The top 5 incentives towards greater disaster resilience that were identified by respondents as something the government could provide to SMEs were: provision of technical assistance, consultancy services, or training in BCP preparation and disaster preparedness; subsidies, grants, and soft loans for disaster preparedness; tax credits, deductions, and exemptions for having a BCP; certification schemes; and awards and recognition for disaster resilient SMEs.

The survey indicates that amongst urban SMEs, even in areas prone to natural hazards, there is a need for SME awareness and training on both natural hazard risk and BCP:

- 90% of the respondents had not attended any training related to BCP;
- 91% of the respondents had not participated in any training related to disaster risk management.



Including SMEs in the systems for disaster management and climate change adaptation

nclusion of SMEs in legal, institutional and policy frameworks for climate change adaptation and disaster risk management, is important in addressing their shared community disaster risks, as well as many of their business continuity disaster risks related to physical damage, supplier and market access and public infrastructure and service support.

SMEs and the disaster management system

Institutional and legislative framework

The national system of disaster risk management is established by Law Number 24 of 2007 concerning Disaster Management (the DM Law), and a series of Government regulations made to implement the law. The original impetus for this law was the December 2004 Indian Ocean Tsunami, and Indonesia led the way in the region in establishing a comprehensive disaster risk management law.

The DM Law takes a multi-hazard approach, defining 'disaster' broadly to include 'natural disaster' (e.g. earthquake, tsunami, volcano eruption, flood, drought, typhoon, landslide), 'non-natural disaster' (technological failure, 'modernization failure', and epidemic) and 'social disaster' (e.g. social conflict and terrorism) (Article 1). It is concerned with the whole spectrum of disaster risk management:

reduction of exposure through the integration of disaster management into development planning, including through regulation of land use and requirements for 'disaster risk analysis' for potentially high-risk developments (Articles 7(1)((a)&(b), 39, 40) and also includes criminal sanctions for people or corporations that undertake highrisk developments without such risk analysis (Articles 75-79);

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- pre-disaster measures, including disaster risk reduction (DRR), risk assessments and risk mapping, structural mitigation, prevention, preparedness and early warning systems (Articles 34-40);
- emergency response, including search and rescue, and disaster aid in the form of basic necessities and community support services (Articles 48-56); and
- > post-disaster, including rehabilitation and reconstruction (Articles 57-59).

More detail is added on each of these areas in the DM Law's general regulations.³⁰ The DM Law also establishes the framework for disaster management funding, supported by a specific regulation. Funds come from both national and regional government budgets, and also community contributions where possible.³¹

The DM Law envisages shared responsibility between the national Government and regional governments, in particular through the institutional framework of the National Disaster Management Agency, known by its Bahasa acronym BNPB, which was established in January 2008.³² BNPB also has regional level branches,³³ and the law provides for local branches as well. It is a non-departmental government institution at the same level as a ministry (Article 10).

The BNPB is led by an appointed Head,³⁴ a Disaster Management Steering Committee, and a Disaster

33 Known by the Bahasa acronym, BPBD, for "Badan Penanggulangan Bencana Daerah". Management Executive Committee.³⁵ The Steering Committee is the high level policy committee, and is of interest in terms of cross-sectoral coordination with other ministries, and also the potential for private sector engagement in the DRM system. The DM Law requires its establishment, but Regulation No. 8 defines the Steering Committee as having 19 members (Regulation 8, Article 11). These are 10 government officials, from the ministries of People's Welfare, Home Affairs, Social affairs, Public Works, Health, Finance, and Transportation, as well as the Department of Energy and Mineral Resources, the National Police and the National Army. These 10 governmental representatives do include Finance, but do not include any agencies relevant to business registration, trade, or industry development, and specifically not the Ministry of Cooperatives and SMEs (MoCSME). Therefore there may need to be a specific mechanism established for the DRM system and SME development systems to cooperate in increasing SME resilience. In addition, the Steering Committee includes 9 'experts/professionals and/or community figures.' This structure does provide an opening for private sector participation, but there may also be other ways to engage the private sector, and SMEs in particular, in the DRM system.

The DM Law is very comprehensive, and is understandably most concerned with risk reduction, disaster injuries and losses, and recovery of individuals and communities. Enterprises are described in the DM Law English translation as 'business institutions' (defined as state or privately owned enterprises or cooperatives based in Indonesia) which have a role in disaster management, but that role appears to be only as service providers (Articles 28 and 29). Although the DM Law mentions socioeconomic recovery in general terms, there is minimal attention to livelihoods or private economic activity, regarding either risk reduction or recovery. For example, Article 58 lists other forms of rehabilitation, but only 'socioeconomic and cultural recovery' could encompass business recovery, while Article 59 mentions a range of reconstruction development activities that include the very

³⁰ Government Regulation 21 of 2008 concerning Disaster Management, Articles

³¹ DM Law Articles 60-70; and Government Regulation No. 8 of 22 of 2008 concerning Disaster Aid Financing and Management.

³² Government Regulation No. 8 of 2008 concerning National Disaster Management Agency. BNPB is for the Bahasa "Badan Nasional Penanggulangan Bencana".

³⁴ Reports to the Coordinating Minister for People's Welfare, according to Regulation 8 of 2008, Article 4.

³⁵ Roles and responsibilities are set put at length in Regulation 8 of 2008.

general 'improvements to social, economic and cultural conditions'. Similarly general terminology is used in the main Regulation concerning Disaster Management, No. 21 of 2008. On the other hand, the rights and obligations of 'communities' to receive assistance and support also apply to SME owners (Article 26 and 27). These general provisions certainly do not preclude SMEs from participating in and benefiting from community based risk reduction and recovery efforts. Furthermore, to the extent that disaster management planning is required to be underpinned by local disaster risk data, this can be an important resource for SMEs in business continuity management (BCM) and in the preparation of their business continuity plans (BCPs).

Much more specific reference is made to business recovery in the Regulation concerning Disaster Aid and Financing Management, No. 22 of 2008. Article 27 of that regulation provides for soft loans for 'productive business' to be made available to disaster victims who have lost their livelihoods. This is subject to verification by BNPB, and requires a Regulation by the BNPB Head as well as approval from the Minister of Finance.

DRM Polices, Plans and Strategies

Key policies and plans include:

Indonesia: National disaster management plan 2010-2014 (Renas PB) (in Bahasa)³⁶

Disaster management planning has been strengthened at the provincial and district/city levels in recent years, including the development of DM Plans for all provinces in 2012-2013, and for 61 districts and cities. BNPB also piloted villagelevel DM Plans in 8 villages in the Districts of West Pasaman, Pandeglang, Jember and Sukabumi, with the expectation that such local DM Plans may support mainstreaming of DRR into regular development planning.³⁷

SMEs and climate change legislation and institutions

Institutional and Legislative Framework

Indonesia's legislative framework for climate change is not based on a single national law, but on a range of laws, decrees and regulations passed by individual ministries. The main environment laws of relevance are Law No. 32 of 2009 on Environmental Protection and Management, and Law No. 321 of 2009 on Meteorology, Climatology and Geophysics.

On the environmental management side of climate change, the key agency is the newly established Directorate General of Climate Change in the Ministry of Forestry and Environment (Forestry and Environment Ministries were merged in 2015³⁸). The Directorate replaces the inter-ministerial National Council on Climate Change (which operated from 2008 to January 2015).³⁹

The overall adaptation strategy and integration of CCA into development planning, policy coordination, and implementation, is shared by the Ministry of National Development Planning (MNDP), and the National Development Planning Agency (BAPPENAS, for its acronym in Bahasa).

There is also the Indonesia Climate Change Trust Fund (ICCTF), established by Decree of the Minister of BAPPENAS 2009. It has been operational since 2010, and aims to scale up financing by seeking to develop innovative links between international finance and domestic investment.

Policy and Strategy

Some key policies, strategies and initiatives on climate change have included:40

³⁶ http://www.mpbi.org/files/peraturan/RENAS-PB-2010-2014. pdf

³⁷ Indonesia, BNPB. 2014. National progress report on the implementation of the Hyogo Framework for Action (2013-2015). P. 2.

³⁸ Ecosystem Marketplace news report. 10 June 2015. 'Merging Of Indonesia's Forestry And Environment Ministries Continues With Inauguration Event' http://www.ecosystemmarketplace. com/articles/merging-of-indonesia-s-forestry-andenvironment-ministries-continues-with-inauguration-event/

³⁹ Source: Grantham Research Institute on Climate Change and the Environment, London School of Economics (LSE). http:// www.lse.ac.uk/GranthamInstitute/legislation/countries/ indonesia/

⁴⁰ Source: Grantham Research Institute on Climate Change and the Environment.

- The Action Plan to Respond to Climate Change (RANPI) 2007, Environment Ministry.
- The Climate Change Sectoral Roadmap 2010, BAPPENAS.
- Presidential decree 61 of 2011 on the National Action Plan to Reduce Greenhouse Emissions (RAN GRK), signed in 2011 (mainly concerned with mitigation and emission reductions).
- The National Adaptation Action Plan on Climate Change (RAN-API) 2012.⁴¹
- Identification of the green economy in the National Medium Term Development Plan for 2015-2019 (RPJMN 2015-2019) as the foundation of the country's development programme. The Plan also aims to support the development of green cities; "develop rural and remote areas, with special attention on border areas, disadvantaged regions, transmigration areas, and small islands; eradicate illegal logging, fishing and mining; improve governance in natural resources and increase community participation in forest management; and increase community resilience to climate change impacts " in 15 vulnerable areas defined in the National Adaptation Action Plan on Climate Change.42

The National Adaptation Action Plan on Climate Change has the three key objectives of ensuring economic and livelihoods resilience, as well as resilient environmental services. It provides detailed information on expected changes that will require adaptation, and maps the sectors likely to be affected (e.g. economic, livelihood, environment and special areas).⁴³ Food and energy security are highlighted as the key areas of capacity in economic resilience, in particular 'climate smart agriculture',⁴⁴ which is highly relevant to the majority of SMEs n the agricultural sector to become resilient to climate change. Adaptive infrastructure is also a priority in the Plan, as an essential form of support for livelihoods resilience.⁴⁵ The adaptation needs of urban areas, coastal areas and small islands are also highlighted for the communities in these locations, including improved spatial planning and community capacity building, of which SMEs should presumably be a part.

Roadmap Issues for SME inclusion in CCA and DRM system(s)

Some issues for exploration during the roadmap process concerning climate change and disaster resilience for SMEs include:

- How to enhance implementation coordination across sectors.
- How to engage private sector organizations, such as the Employers' Association of Indonesia (APINDO, for the Bahasa name, Asosiasi Pengusaha Indonesia), and the Indonesian Chamber of Commerce and Industry (for Kamar Dagang dan Industri Indonesia) (KADIN).
- How both local government planners and the private sector can have better access to local disaster risk information (risk assessments and hazard mapping) and to downscale climate change projections and advice on their implications – for existing business operations and for decision-making about siting of new industrial parks and individual enterprises.

44 RAN-API Synthesis Report p.35.

⁴¹ Indonesia, MNDP (Ministry of National Development Planning) and BAPPENAS (National Development Planning Agency). 2012. Indonesia National Adaptation Action Plan on Climate Change (RAN-API), Synthesis Report. Jakarta: MNDP/ BAPPENAS. http://bappenas.go.id/files/2913/4985/2794/ national-action-plan-for-climate-change-adaptation-ran-apisynthesis-report_20121226163242_0.pdf

⁴² Source: Grantham Research Institute on Climate Change and the Environment.

⁴³ Grantham Research Institute on Climate Change and the Environment. 2015. The 2015 Global Climate Legislation Study: Indonesia. LSE: London. P.7.

⁴⁵ RAN-API Synthesis Report p.37.

Disaster resilience in Indonesia's support for SME development

The SME Development and Promotion System

Legal Basis

Article 7 of Law No. 20 of 2008 on Small and Medium Enterprises, states that the national Government and Local Governments are to create an enabling business climate by establishing laws and policies covering SME: funding; facilities and infrastructure; business information; partnerships; business licenses; business opportunities; trade promotion; and institutional support. It also requires that business and communities participate actively to foster such a business climate.

Ministry of Cooperatives and SMEs MoCSME

The Ministry for Cooperatives and SMEs (MoCSME) is the lead agency fort SME development, although it is also notable that SME development strategies in Indonesia have been incorporated in the National Medium Development Plan (RPJM 2010–2014), which then flows into the Strategic Plans of a range of implementing ministries and agencies.⁴⁶

MoCSME has adopted seven strategic targets, including: (i) increasing the number and role of cooperatives and SMEs (including micros); (ii) empowering cooperatives and SMEs; (iii) enhancing their competitiveness; (iv) increasing their sales; (v) providing better access to finance and credit guarantees; (vi) improving the business environment for cooperatives and MSMEs; and (vii) developing their capacity in entrepreneurship. MoCSME works closely with the BAPPENAS in reviewing and evaluating the strategy.⁴⁷

⁴⁶ ASEAN. 2014. ASEAN SME Policy Index: Towards Competitive and Innovative ASEAN SMEs. Jakarta: Economic Research Institute for ASEAN and East Asia (ERIA). P. 16.

⁴⁷ ASEAN. 2014. ASEAN SME Policy Index: Towards Competitive and Innovative ASEAN SMEs. Jakarta: Economic Research Institute for ASEAN and East Asia (ERIA). P. 16.

The programs include business incubators, business development services (BDS – with over a thousand centers throughout the country), and centers for integrated commercial services called PLUT (Posit Layanan Usaha Terpadu), and a network of one-stop shop business development centers across the nation, with customized services for SMEs. However, currently, government is not allowed to provide grants to incubators although it can provide facilities for the incubators, and uptake of new technologies such as e-services is limited.⁴⁸

Based on information from workshop participants, MoCSME also undertakes funding facilitation, education and training, legal resources on intellectual property and other business law, and direct technical assistance and grants for improved production and packaging, including halal certification. It also researches SMEs in ASEAN on questions of Indonesian SMEs in the ASEAN Economic Community (AEC). It has provided assistance to SMEs affected by disasters through means such as facilitating finance, coordination with other government agencies to restore normal operational capacity in a disaster-affected area, and business training for SMEs affected by disaster.

Ministry of Trade, Directorate of SMEs and Domestic products

The Ministry of Trade, Directorate of SMEs and domestic products has also provided support in disaster areas, providing for example: business trade equipment (such as carts, display cabinets, tent, cool boxes); revitalization of traditional places; and facilitating marketing access for SMEs that are affected by disaster through business gatherings with large companies and supporting them to participate in local/national/international exhibitions. (Source: workshop participants).

Other ministries

Prior to the workshop BNPB had begun to prepare training and guidance for SMEs in BCPs that take disaster risk into account, in order to build "pasar aman bencana" (markets secured from disaster). This work is being developed within the BNPB Directorate of Social Empowerment, Sub-Directorate on the role of private sector institutions. The sharing at the workshop opened a new opportunity for this training development work to continue jointly with MoCSME.

Ministry of marine and fishery industries gives financial aid to fishermen to sell their catch during and after disasters, and has signed an MOU with BNPB for coastal rehabilitation efforts, implementation of disaster mitigation, and implementation of emergency disaster management.

Other institutions

- AIB Association of Indonesian Business Incubators (AIB, for Asosiasi Inkubator Bisnis).
- APEC Center for Entrepreneurship (ACE) hosted by KADIN / CCI.
- BBPEICenter for Indonesian Export Training (BBPEI for Balai Besar Pelatihan Ekspor Indonesia).

SME access to Finance

There are many components to SME financing and this report does not attempt to provide a comprehensive picture. However, some background on policy objectives and some examples of the financing options available for SMEs highlight the connections between business development and disaster resilience.

Business lending

A common problem for SMEs in may countries is the lack of collateral to secure loans. In Indonesia the central bank's regulation states that the collateral is the business itself, but banks usually require additional collateral to ensure the loan is repaid. However, the definition of collateral in Indonesia is not rigid, often extending beyond fixed assets,

⁴⁸ ASEAN. 2014. ASEAN SME Policy Index: Towards Competitive and Innovative ASEAN SMEs. Jakarta: Economic Research Institute for ASEAN and East Asia (ERIA). Pp. 16 and 30.



in practice, to moveable assets and/or flexible provisioning requirements for loans under a certain amount or for certain types of loans.⁴⁹

In 2012 the Government announced the National Strategy for Financial Inclusion, one aspect of which was increased access to finance for informal, micro, and small enterprises.⁵⁰ In addition, a 2012 Bank Indonesia Regulation (No. 14/22/PBI/2012) requires banks to allocate 20% of their loans to SMEs by 2018, via a series of stepped targets that began to take effect with a 5% requirement in 2015.⁵¹ Banks can achieve these targets either through direct lending or allocating budgets to SME training programs. Assuming some banks will need to use the SME training option, the content could be designed to include disaster risk reduction and multi-hazard BCP, as a way to enhance SMEs long-term viability.

Some government programs for SMEs such as PKBL and LPDB do not require any collateral.⁵²

There are also many institutions providing microfinance facilities throughout Indonesia, including banks, cooperatives and other microfinance institutions, including many established by private entities. According to data from Indonesia's Financing Companies Association (APPI), in 2012 there were close to 200 companies offering microfinance.⁵³ These are important services for the many micro enterprises in Indonesia, including for the purposes of disaster recovery, as they have long supported the traditionally underserved and low-income segments of the market in Indonesia.⁵⁴

SME credit guarantees

Credit guarantees for SME loans are also important for their access to finance In Indonesia, as few have sufficient collateral to satisfy most bank lending requirements. Credit guarantees to lending institutions for SME loans are not conditional in the same way as insurance and provide a secure base for banks to increase SME lending. Indonesia has a credit guarantee scheme that is managed by Jamkrindo (Indonesia's Credit Guarantee), through a range of schemes. Askrindo is another leading institution for credit guarantees.⁵⁵ The Central Bank (Bank Indonesia) also plans to establish credit guarantee schemes for agriculture, farming, and fishery. The credit guarantee facility is still limited in number and volume, as only 30 percent of SME loans are guaranteed by the government,⁵⁶ although there are also other ways of subsidizing lending to SMEs, such as by paying for the fees that banks pay to credit guarantee companies. Jamkrindo is also developing a greater market for SME loans by liaising directly with SMEs and banks, although the lack of institutional structures amongst SMEs makes such direct contact costly.

There is also the People's Business credit (KUR) public credit guarantee scheme designed for SMEs, under which 70-80% of the credit is guaranteed by the government and the participating banks take only 20-30% of the credit risk. Although these are not specific to disaster risk, but are for investment capital and working capital, already in 2014 KUR loans had been used by 12.5 million SMEs.⁵⁷

At present, Jamkrindo's credit assessments of SMEs for guaranteed loans are not based significantly on indicators of disaster resilience, but on the other hand, they find that banks are less willing to lend in the agricultural sector because of its high vulnerability to climatic events and other natural hazards. More SME lending is available for SMEs in wholesale and retail trade and the hotel and restaurant sector, which accounts for more than 50% of SME loans, then the service sector (almost 16%) and manufacturing (almost 10%).58 Interestingly, this unbalanced lending pattern suggests that increasing disaster resilience in the agricultural sector could potentially increase that sector's access to capital - for growth, or accessing new markets, or increasing use of technology. This is an example of how disaster resilience and SME business development could go hand in hand,

⁴⁹ ASEAN. 2014. SME Policy Index 2014. P 67-68.

⁵⁰ ADB. 2015. SME Finance Monitor 2014. P. 176.

⁵¹ ADB. 2015. SME Finance Monitor 2014. P. 171.

⁵² ASEAN. 2014. SME Policy Index 2014. P 68

⁵³ ASEAN. 2014. SME Policy Index 2014. P 67

⁵⁴ ADB. 2015. SME Finance Monitor 2014. P. 172.

⁵⁵ ADB. 2015. SME Finance Monitor 2014. P. 171.

⁵⁶ ASEAN. 2014. SME Policy Index 2014. P 68

⁵⁷ ADB. 2015. SME Finance Monitor 2014. P. 172.

⁵⁸ ADB. 2015. SME Finance Monitor 2014. P. 170.

although overall risk reduction for agricultural SMEs is complex.

Insurance and other SME financing

Some other institutional mechanisms that offer finance to SMEs include:

- The Center for Development of SMEs (CD SMEs) is a private sector/non-government organization located throughout Indonesia, though heavily concentrated in the urban areas. CD SMEs are members of an international organization that specialize in the promotion of financial SMEs, with SME financial institutions as its members.
- APPI Financing Companies Association of Indonesia (APPI for Asosiasi Perusahaan Pembiayaan Indonesia).

Indonesian Export Financing Agency (LPEI for Lembaga Pembiayaan Ekspor Indonesia)

- Opening access to new market by facilitating exhibitions and business matching.
- Coordination with government (ministry of trade, ministry of social, etc.) to support SMEs in terms of policy or access to support for marketing and export.

Given APINDO's current focus on SME development, it may be a relatively small step to liaise with them to build SME capacity in disaster resilience, especially increasing the use of multi-hazard BCP.

KADIN

The Indonesian Chamber of Commerce and Industry, KADIN, has an SME Learning Center..

International NGOs

Oxfam's regional project on SMEs in the agricultural sector is aimed at food security and poverty reduction. Their survey (cited in Part 3) was part of a scoping study to determine SME needs regarding disaster resilience.

Private Sector & NGO Support for SMEs

A number of foreign governments and development partners have implemented a variety of programs supporting SME development in Indonesia. Private sector and non-government organizations in Indonesia also contribute, and some examples are noted below.

Industry Organizations

APINDO

The Employers' Association of Indonesia, APINDO, SME Division has a program for developing SMEs that includes:

> Training for business managerial, financing, and human resource development.

Gender and SME Development and Resilience

SME ownership in the SME Survey sample group was almost equally men and women. As yet there are no national statistics on SME ownership, but it is expected that the new SME special license scheme - IUMK - will provide such data in the future.

In the meantime it may be useful to (1) engage with government, business and academic institutions concerned with gender equality in Indonesia, and (2) undertake social research on women in micro and small business to determine whether there are important gender differences that require specific policy interventions to ensure both business development and disaster resilience of womenowned SMEs.

Roadmap Issues

- The extent to which the current legal definition of SMEs provides a good basis for targeted policy intervention.
- Whether new approaches to statistical collection and analysis of SME data could provide more readily accessible data on SME characteristics, their contributions to the economy in different sectors and regions, and disaster and climate risk in different industries and localities.
- How the SME development and financial institutions could provide incentives to encourage SMEs to include natural hazard and other disaster risk factors, as well as climate change projections (especially sea level rise), as essential components of their BCM. For example, through inclusion of disaster resilience BCP as part of the criteria for access to credit, or by providing tax incentives for conducting risk assessment and BCP.
- > Whether the credit guarantee system for SMEs could more effectively increase SME access to capital for general business development including investment in disaster and climate risk management as part of BCM, such as investment in risk assessments, physical disaster mitigation measures, emergency training and BCP.

- How to increase SME capacity and expertise in disaster risk management through engagement with BNPB and local/city governments in risk assessments, hazard mapping and BCM training on natural hazard risks, in line with the DM Law.
- How to improve SME awareness of climate change risks by engaging with MoE, BAPPENAS and the MNDP, to undertake medium to long term risk assessments for areas and business types likely to be affected by climate change, such as coastal tourism and fishing, and river delta agriculture, to support them in planning for adaptation, relocation, or in making choices about new sites, in line with the National Action Plan for Climate Change Adaptation.
- Generally how to encourage and support a move from micro size household businesses to small and medium enterprises, including access to capital and disaster risk financing, and capacity building on BCM that includes disaster and climate risk.
- How to build momentum on climate and disaster resilience amongst SMEs, through mechanisms such as nominating SME disaster resilience champions, representing both men and women from the SME sector, who might receive special training and ongoing support as peer educators.

Towards a Road Map for SME Disaster Resilience in Indonesia

Approaching a roadmap process for SME disaster resilience

In moving towards a roadmap to promote SME disaster-resilience it will be important to engage the relevant stakeholders, including private sector organizations or other groupings that can represent SMEs across all key sectors, and also to link with Government institutions' legal mandates, planning, policy and budgetary processes, as well as to access their expertise. Accordingly, this report does not make specific recommendations but, rather, raises issues for consideration during the process, some of which have been identified in the foregoing report as "roadmap issues". These are intentionally open-ended, as it is not the purpose of this report to provide answers, but to identify SME disaster resilience needs, based on the survey, to give a strategic policy analysis, and to identify issues for framing a roadmap process.

In thinking about how to disaggregate "SME disaster-resilience" into practicable elements for a roadmap, it is helpful to consider:

Who needs to be concerned with SME disaster resilience: Who are the SME target groups? Who are the wider stakeholders? Who are the experts who can support the process, and help to fill the knowledge gaps? Who can implement the different policies, strategies or activities that may emerge from a roadmap process?

How can all those concerned can be engaged: What mechanism or processes can be used to ensure that rural and regional SMEs, different industry sectors, different size SMEs, women-led SMEs and other relevant government and nongovernment organizations can participate in a roadmap? Which policy mechanisms or actions can best support SMEs to become more disaster-resilient: Is it any or all of disaster risk information, training/ capacity-building on including DRM/CCA in BCM, better integration into the DRM system at local level, tax incentives, loans, insurance or other disaster risk financing?

What are the identified needs: What do we know about the extent and type of SME disaster losses, their risk of exposure to hazards, and their vulnerability to different types of hazard? Do different categories of SME have different risk factors? What do we know about the current level of knowledge, disaster-preparedness and disaster risk management of SMEs? What support do they need to become more resilient to disasters? Do SMEs in different sectors or regions, or of different size or type of business structure have different support needs? What else do we need to know?

Who are the stakeholders and experts?

Understanding that the SME roadmap process will be led by MoCSME, it will also be important to include: SME and private sector business organizations; the Government and technical organizations whose expertise is needed for improving SME climate and disaster resilience; the other ministries, departments and institutions that underpin SME support in terms of business registration, standards accreditation, tax incentives, finance, disaster insurance, BCM training and capacity building; and INGOs and development partners already engaged in SME development and disaster resilience projects in Indonesia.

Private sector

SMEs and the industry bodies that represent them need to be seen as the key stakeholders in an SME resilience road mapping process. This may include, for example: APINDO, the Employers' Association of Indonesia; and KADIN, the Indonesian Chamber of Commerce and Industry..

Government

As described in Parts 4 and 5, the enabling environment for Indonesian SMEs' disaster resilience encompasses two main groupings of laws, policies and government institutions. These are, on the one hand, the closely-related systems of disaster risk management (under the stewardship of BNPB) and climate change adaptation (under the joint stewardship of the Directorate General of Climate Change in MoFE, on the environmental management side, and, on the sustainable development side, the MNDP and BAPPENAS).

The DRM and CCA systems focus on hazards, risk reduction, early warning, response and recovery, as well as longer term planning for mitigation and adaptation to the projected impacts of climate change. BNPB, MoFE, MNDP and BAPPENAS and their technical units are the reservoirs of current knowledge in these areas, as well as having information and capacities in training, awarenessraising, risk mapping and development planning that are essential for SMEs to take adequate account of natural and other hazards, and climate change projections, in BCM. However, MoCSME and its associated institutions and mandates are needed to bring the DRM and CCA issues into the mainstream, to ensure that disaster resilience is a key component of SME development.

The roadmap process could review mandates to establish more formal and sustained institutional cooperation between the systems for SME promotion and both DRM and CCA. For example, the momentum for improving SME disaster resilience could be supported through technical cooperation in areas such as risk assessments and hazard mapping as the basis for mitigation and preparedness measures, awareness raising of SMEs, contingency planning and emergency drills, effective dissemination of early warnings, and SME capacity in emergency response. Many of these elements can be factored into BCM if the enterprises have the relevant risk data and access to expert materials and advice, in particular during the development of enterprise level or area BCPs. The needs of local SMEs can also be more effectively integrated into local DRM by including them in CBDRM programmes.

Experts and technical institutions

A range of government, private sector, NGO, development partners and academic expertise can potentially be engaged in the roadmap process to support and advise on the content and feasibility of proposals, as well as to deliver projects and programmes such as: undertaking or interpreting risk mapping and localized data on natural hazards and climate change risk; developing and delivering standards and training on multi-hazard BCM and BCP; and undertaking pilot projects to test methods for supporting SME disaster resilience in different sectors and regions.

How stakeholders can be engaged

- The Government is in the best position to determine appropriate mechanisms for engagement of stakeholders during the roadmap process. However, some suggestions include:
 - a. Undertake specific SME consultations to ensure that SMEs in different industries and different regions, urban and rural, can contribute to identifying their disaster resilience needs and to propose the most effective means of government support.
 - Include in the roadmap process a strategy for consultation with women headed SMEs and organizations that support women in business.
 - c. Consider providing ongoing government support and capacity building for national, regional and local SME organizations, such as the APINDO SMEs Division, and SMEs within KADIN, as well as any emerging SME bodies and local organizations..
- This could be a way to include SME concerns in institutional structures that address SME disaster resilience and business support, as well as providing a structure for SME capacity

building and communication between government and SMEs.

 Specific consultation with both first and second level cooperatives may also open up a useful mechanism for ongoing development of SMEs in disaster resilience.

Which policy mechanisms or actions might be addressed

As noted above, as yet there appears to have been little engagement as between the various government institutions supporting SME development on the cross-cutting issue of SME disaster resilience, especially in the areas of disaster risk reduction and prevention for SMEs, and targeted awareness and training for SMEs on DRM. The issue for SMEs is that, at a government policy level, the specific question of their disaster resilience can easily be seen as both everybody's business, and nobody's business.

Risks from climate change also need to be addressed for SMEs medium and longer-term business continuity and growth. Some of these risks are locality-based, such as coastal areas subject to seal level rise, while others are more generalized, such as drought and flood extremes affecting agricultural production.

What issues might be considered

The SME Resilience Survey identified a need for SMEs to have much greater awareness of the costs of disasters when they occur, and of the need to factor this into BCM, requiring training on both BCP and disaster risk management. It also identified the need to take a multi-hazard approach, given SMEs own preoccupations with the broader economic and business environment, in order to engage with them more effectively. The survey results indicate the importance of demonstrating to SMEs that BCM which improves disaster resilience also improves the bottom line. SMEs surveyed were also interested in receiving support and advice from the government, as well as tax relief and other financial incentives based on BCP and demonstrated disaster resilience capacity.

In terms of existing government support for SME disaster resilience, the key finding was that so far the institutional and legislative systems for DRM, CCA and SME business development have not joined hands to provide the necessary support. A roadmap process is an opportunity to create both mutual understanding and awareness, and to establish specific mechanisms for such coordination into the future.

Some specific roadmap issues arising from this report, which can be used as a starting point, are summarized below.

Legislative base for government SME support

- 4. Defining SMEs in a way that facilitates more targeted policy interventions
- Institutionalizing cooperation between the government-led systems for SME development and promotion, and the specialist agencies coordinating disaster risk management and climate change risk; and
- Institutionalizing participation of the private sector, especially national bodies, industry organizations and existing or newly established SME organizations on an ongoing basis in national mechanisms for implementing SME development and disaster resilience support.
- 7. Reviewing and updating financial incentives for SMEs to reduce risk and prevent damage and loss from disasters, including though measures such as tax deductions for expenditure on preparing BCPs, and reduced insurance premiums or lower interest loans based on evidence of strategies for disaster resilience and broader BCM.

Statistical base for government SME policy targeting

Review current statistical collection and analysis of SMEs in Indonesia to determine whether more quantitative and qualitative data on enterprise characteristics is needed to ensure that policy interventions can address their disaster resilience. While some of these statistics will gradually become available as the special SME licensing system, IUMK, comes into operation, consideration may need to be given as to how the enterprise data for license-holders will be updated, and whether this system could form the basis for regular enterprises surveys. For example, it may be useful to collect additional data, such as turnover and economic contributions by enterprise size, SME ownership by gender, age of enterprises, location, geographical risk factors from exposure to hazards, and industry sector in detail.

Multi-hazard BCM for SMEs

- Strengthen SME capacities in all-hazard BCM, including risk assessment for all risks and the development of BCPs to increase their resilience to natural hazards, technological hazards and economic shocks
- 9. Review BCM and BCP standards and training materials to ensure they provide an adequate basis for SMEs to assess and incorporate natural hazard and climate change risk, along with technological hazards and economic risks..
- Establish mechanisms for government, private sector industry organizations and technical experts to work together, to assess SME disaster resilience needs on a sectoral basis and potentially develop tailored all-hazard BCM approaches by industry.
- Support SMEs to develop area, cluster, and enterprise level BCPs, through direct training support and tools, as well as incentives such as tax deductions, or preferential terms of loans and insurance for enterprises with BCPs.

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- 12. Conduct awareness-raising and natural hazard risk mapping at provincial, city and local levels, to provide the necessary technical data for (a) enterprise and area BCPs, and (b) improved local land use planning regulation, focusing initially on the localities already known to be at high risk, and where there are concentrations of exposed and vulnerable SMEs.
- 13. Undertake climate change awareness-raising and specific risk mapping to develop technical advice for SMEs by district and area as to the projected effects of climate change. This could focus on enterprises in coastal cities and river deltas, as well as on agricultural production, and include advice and training on enterprise-level adaptation measures. The mapping process would also form the basis for broader government policy on land use planning, for building climate-change-resilient infrastructure, and planning for specific mitigation infrastructure in high risk provinces, cities and areas.

Disaster Insurance and Risk Financing

Review the extent to which SMEs have taken up insurance or other risk financing mechanisms to help shield them from disaster losses and maintain business continuity, and consider what incentives or restructuring might be needed to increase disaster insurance cover and associated risk-based premiums.

Institutional cooperation mechanisms for response and recovery support

- 14. Consider how the formal planning processes of MoCSME and the financial institutions can better integrate support for SME disaster resilience as a cross-cutting issue within their main sectoral planning priorities and implementation strategies.
- Institutionalize support for SME emergency response and initial recovery by mechanisms such as engagement of SMEs in local DRM mechanisms, including community based disaster risk reduction

Private Sector and SME Capacity

Consider ways in which Government institutions can both access existing private sector capacity and improve organizational structures for SMEs. For example:

- 16. strengthen emerging SME organizations, or the capacity of umbrella industry organizations to support SMEs, by providing funding or secretariat support, so that the government can more readily access SMEs own concerns, and as a means of strengthening SMEs capacity to raise awareness and offer tailored training and information for improved disaster resilience; and/or
- 17. work with large enterprises (foreign and national) and industry cooperatives to address supply chain issues and economies of scale for SME implementation of BCM that includes disaster resilience.

SME Survey Methodology and Sample

A. Purpose

The purpose of the SME Survey was to investigate the disaster experiences of Indonesian SMEs. and their readiness to deal with disasters. It aimed to identify what kinds of hazards SMEs consider to pose the greatest risk, including economic risk, natural hazard or technological hazard. It also aimed Annex to gauge the level of knowledge and understanding of SMEs about disaster risk and business continuity plans, as the basis for identifying what types of support can help them to become more disaster resilient.

B. Methodology

The survey of 400 respondents was conducted in two ways. The first method was one-onone interviewing with the selected respondents, using the survey questionnaire, and the second way was distributing the questionnaires during seminars. In the seminars, SME participants were briefed on the questionnaire, and then completed it by themselves. The University of Indonesia (UI) conducted two similar seminars, on the 26th of November 2015 in UI Campus, Depok, and on 10th December 2015 in University Gajah Mada (UGM) Campus, Yogyakarta. The first seminar produced 65 valid questionnaires, and the second seminar produced 70. The remaining respondents were interviewed in the selected localities, by which means 100 responses were gathered from Aceh, and 165 from Jabodetabek (Jakarta, Bogor, Tangerang, Bekasi, the cities around Jakarta which located in West Java Province).

Both seminars were announced to the public on the website and social media. Participants are requested to register online to book a seat in the seminar. However, many participants who do not register in advance still attended to the seminar or the participants brought their friends or relatives who are actually not SMEs. Then we just collected the questionnaires less than the participants that come up in the seminars.

The theme of the first seminar that was held at the University of Indonesia was "Business Management Services for SMEs" and for the second seminar was "Overcome Economic Crisis and Disaster". Most of the participants came with a motivation to have more knowledge for developing their business and also networking to other SMEs and academes.

Survey areas and sectors

The geographical distribution and number of respondents to the survey is presented in Figure A1. One-on-one interviews using the same questionnaire were conducted for the respondents in Aceh and Jabodetabek.

Figure A1 Respondents by location

Place taken	Number of respondents
One-on-one interview in Aceh	100
One-on-one interview in Jabodetabek	165
Seminar in Depok	65
Seminar in Jogja	70
Total	400

Respondent's business sectors were broad – see Figure 4 in Part 3 of the report.

Most of the respondents (80%) employed fewer than 5 workers, and none employed more than 99 workers.

Figure A2 Respondents by number of workers employed

Number of workers	Percentage
Less than 5	80%
5 – 19	18%
20 – 99	2%
More than 99	0%

According to government of Indonesia law No. 20 year 2008 about categorization of SMEs according assets, most of respondents are categorized as micro enterprises: 75% micro, 24% small, 1% medium, and 1% large.

Only 2% of respondents have a certificate for relevant ISO standards.

Figure A3 Status of respondent IS0 Standards Certification

Certificate	Percentage
ISO 9001 (Quality management)	2%
ISO 14001 (Environmental management)	0%
ISO 22301 (Business continuity management)	2%
None	96%

Figure A4 shows frequency of respondent according to their year of commencing business operation. The table shows that most of the business ages are relatively young (under 5 years old). But among them, there are businesses that have already operated since 1970.

Figure A4 Percentage respondents according to year of commencing business operation



Gender of respondents in this survey is quite proportional, which is 52% male and 48% female.

Questionnaires

The questionnaires were tailored to suit the particular characteristic of Indonesia but also kept a similar structure and content to the other country surveys for comparability.

The survey questions were grouped into seven parts.

Part 1	Basic information about the survey respondent
Part 2	Risk exposure and previous disaster experience
Part 3	BCP adoption
Part 4	Incentives and training needs
Part 5	Additional DRR information
Part 6	Contact information
Part 7	BCP implementation (only for those with BCP)

The first set of questions sought basic information about the business operations of the respondents, such as type of the business, gender of owner, year of establishment, location, number of employees and value of assets. These questions made it possible to classify the respondents according to sector and enterprise size (i.e., micro, small, medium, or large). Then, there were questions about perceptions of risk exposure and actual disaster experiences. The intent was to identify which among the many potential natural and human-made hazards are of concern to SMEs, including those which have actually affected them in the past including the extent of damage and how they impacted their business. The next category of questions sought to assess the status of BCP adoption and implementation by respondents. The questions also solicited inputs from respondents on what government can do to promote BCP amongst SMEs. The last group of questions dealt with existing risk reduction measures, previous relevant training and current training needs. These provide additional information on the level of resilience of respondents and their capacity to mitigate impacts of future disasters.

January 2016 Meetings and Workshop Participation

 Meetings held during the mission in January 2016

> Different members of the ADPC team – Mr Aslam Perwaiz, Head of Department, ADPC, Dr Mary Picard, ADB/ADPC International Consultant, and Ms Mio Kato, iPrepare Business Coordinator, ADPC – met with the following for coordination and information-gathering purposes:

SxennA

MoCSME - Ministry of Cooperatives and SMEs, HRD Directorate (key country partner): Ms. Christina Agustin Deputy Assistant, Research, Dr. Johnny Situmorang, Researcher, and staff.

APAD – Mr Faisal Djamal, Chairperson, APAD Sekertariat Planas PRB

JAMKRINDO – Ms. Nina Kurnia Dewi, Directorate of SME (with Dr Picard only)

Oxfam – Mr. Nanang Subana Dirja (focal person) and Mr. Ade Reno Sudiarno (with Dr Picard and Dr Kato only)

19. Participation in Consultation Workshop on Disaster Resilience and SMEs, Jakarta, Indonesia, Hotel Sofyan Inn Tebet, 26 January 2016

(Note: Names and titles given are according to translated attendance list)

National Development Planning Agency (Bappenas)

Satrianda G, Staff of SME directorate

National Disaster Management Authority (BNPB)

lis Yulianti, Head of section, capital intensive business

Ministry of Agriculture

Desniendri, Planning division

Ministry of Cooperatives and SMEs

Rulli Nuryanto, Secretary of human resource development (HRD)

Christina Agustin, Assistant deputy research, HRD directorate

Mulayati, Head of division, institutional directorate Eko Sari BR, Head of division, supervision directorate Ruslan MR, Head of division, HRD directorate, research deputy

Zahara, Head of division, HRD directorate

Sutrisminingsih, Head of division, restructuring directorate, deputy risk mitigation

Irwan, Head of sub-division, HRD directorate, research deputy

Sumiyati, Head of sub-division, institutional directorate, governance deputy

Siti Alfisahrah, Head of subdivision, directorate production and marketing

Munarikh Abbas, Head of section training, human resource directorate

Juherman, Head of subsection, HRD directorate, research deputy

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Ibrahim Sanusi, Researcher

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Eugenia Mardanugraha Lecturer & Researcher, University of Indonesia Aslam Perwaiz, Head of Department and iPrepare Business Facility, ADPC Mio Kato, iPrepare Business coordinator, ADPC Mary Picard, International consultant, ADPC/ADB This publication is an output of the regional project "Strengthening the Disaster Resilience of Small and Medium Enterprises in Asia". The overall objective of the project is to build disaster-resilient capacities in SMEs in Indonesia, the Philippines, Thailand and Viet Nam by undertaking the following activities: 1) Identifying actions to strengthen resilience of SMEs; 2) Providing technical assistance in strengthening resilience to selected SMEs on a demand-driven basis; 3) Supporting governments in strengthening the enabling environment that promotes risk sensitive and informed investments by SMEs; 4) Facilitating knowledge sharing; 5) Up-scaling, leveraging and formalizing business resilience tools, platforms and initiatives.

National Partners

Indonesia

- Ministry of Cooperatives and SMEs (MoCSME)
- Indonesian National Board for Disaster Management (BNPB)

Philippines

- Department of Trade and Industry (DTI)
- National Disaster Risk Reduction and Management Council (NDRRMC)

Thailand

- Office of Small and Medium Enterprises Promotion (OSMEP)
- Department of Disaster Prevention and Mitigation (DDPM)

Viet Nam

- The Ministry of Planning and Investment (MPI)
- The Disaster Management Center (DMC)









