

Singapore

National progress report on the implementation of the Hyogo Framework for Action

Name of focal point : Ms Lim Lay Eng

Organization : Meteorological Services Division, National Environment Agency

Designation : SMO (MMO)

E-mail address : lim_lay_eng@nea.gov.sg

Telephone : 65457224

Fax :

Additional Focal points/ other comments :

Reporting period : 2007-2009

Last updated on : 27 February 2009

Print date : 09 Jun 2009

Reporting language : English

An HFA Monitor update published by PreventionWeb

<http://www.preventionweb.net/english/countries/asia/sgp/>

Strategic goals 1

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Strategic Goal Statement:

Singapore is relatively free from natural hazards due to its geographical location. However, she is not spared from urban hazards such as man-made disasters and terrorist-related threats. Nevertheless, national disaster monitoring and preparedness plans are in place to prevent the occurrence of any hazards from turning into national disasters.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Strategic Goal Statement:

Singapore's OPS Civil Emergency(CE) Plan is a national contingency plan for managing large scale civil and natural disasters. This plan spells out the roles and functions of each agency whose distinct expertise is required to support the operations.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Strategic Goal Statement:

A potential disaster that could affect Singapore is the destructive impact of tsunami. Singapore has developed a national tsunami response plan which is a multi-government agency effort comprising an early warning system, tsunami mitigation and emergency response plans, and public education.

Priority for action 1

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Core indicator 1

National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Singapore Civil Defence Force (SCDF) has been entrusted by the Singapore Government to be the

Incident Manager(IM) for civil emergencies that is defined as sudden incidents involving the loss of lives or damage to properties on a large scale. As the pre-designated Incident Manager (IM) for civil emergencies, SCDF is the overall in-charge of the multi-agency response under the Operations Civil Emergency Plan, or “Ops CE” . The Ops CE Plan is a national-level contingency plan for managing large scale civil disasters. This plan spells out explicitly the roles and functions of each agency whose distinct expertise is required to support the operations.

Context & Constraints:

A civil emergency would also pose grave implications on the national, diplomatic or political fronts and managing the consequences would require multi-agency response. However, multi agencies co-ordination and co-operation is strong in Singapore.

Core indicator 2

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

When OPS CE is activated, the SCDF is vested with the authority to direct all response forces under a unified command structure, thus enabling all required resources to be pooled.

Context & Constraints:

Nil

Core indicator 3

Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Exercises are regularly conducted to test the effectiveness of the multi-agency response and typically involve several hundred participants. Such exercises allow SCDF to foster closer inter-agency cooperation and co-ordination with related government agencies.

Context & Constraints:

Strong support and co-operation are often displayed by the residents' committees.

Core indicator 4

A national multi sectoral platform for disaster risk reduction is functioning.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Description:

The Singapore Civil Defence Force and the Police Force are actively engaged by different responsible agencies in their respective disaster risk reduction effort.

Context & Constraints:

At the moment, each agency is responsible for their own areas of disaster risk reduction effort and warning.

Priority for action 2

Identify, assess and monitor disaster risks and enhance early warning

Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

In the area of disaster monitoring and effective response, SCDF has put in place a robust emergency response system to handle new challenges such as the global threat of terrorism. In the area of natural hazard, Singapore has completed the tsunami risk assessment on Singapore and has put in place a tsunami response plan from various agencies to deal with any tsunami threat.

Context & Constraints:

Nil

Core indicator 2

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

The National Environment Agency (NEA) provides weather surveillance and multi-hazard warning services on a 24/7 basis to the public, industry and relevant agencies in Singapore. Singapore has also developed the tsunami early warning system in 2008.

Context & Constraints:

The challenge is to study on vulnerabilities due to climate change

Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

SCDF also has in place a Public Warning System (PWS) to provide early warning to the general population of any imminent threats that could endanger lives and property. In the event of an impending attack by a hostile element or the occurrence of a man-made or natural disaster, the PWS will be sounded to alert the public to seek refuge at communal or household shelters. In conjunction with the

activation of the PWS, the commercial radio and television stations will also broadcast any advisory messages from SCDF.

The Met Service has in place all SOPs for early warnings of heavy floods, prolonged rain, high temperature, strong winds, tremors due to earthquake and tsunami warning.
Strong outreach to communities on prevention of dengue fever and ways to reduce aedes mosquito breedings.

Regular exercises conducted by various individual organisations to deal with Avian epidemic flu.

Context & Constraints:

More effort required to educate the communities.

Core indicator 4

National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Singapore is actively involved in various regional meetings to deal with transboundary smoke haze pollution in order to reduce the risk.

Context & Constraints:

The problem of transboundary smoke haze is sometimes beyond Singapore's control. There are also other diseases such as the chikuniya disease which was imported to Singapore by foreigners.

Priority for action 3

Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Core indicator 1

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

SCDF has invested heavily in training programmes and facilities. Specialist and command-related courses arm the staff with the necessary skills to perform their duties. Two purpose-built training facilities: the Civil Defence Academy and the Basic Rescue Training Centre, provide some of the most advanced training facilities available in the region.

Context & Constraints:

Nil

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

SCDF works closely with the Ministry of Education (MOE) to incorporate emergency preparedness as a subject within the Civics and Moral Education syllabus for students in the primary and secondary levels. As part of Emergency Preparedness (EP), SCDF introduces short EP modules on essential skills and knowledge in surviving emergencies for schools to conduct during assembly periods.

18 Apart from residents and workers, SCDF recognizes that school students form another important niche group in public education efforts. Since 2005, SCDF has reached out to the youths in secondary schools through the formation of the National Civil Defence Cadet Corps (NCDCC), a uniformed group in which students may participate as a co-curricular activity. In 2007, SCDF started to reach out to primary school students through a Fire Station Engagement Programme. Liaison Officers from fire stations will be deployed to the schools to train the students and prepare them to deal with emergencies and threats posed by the new security environment.

Context & Constraints:

Nil

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

SCDF has created a working culture which encourages and supports innovation. This is manifested in an innovation framework that is supported by a mix of physical and virtual infrastructures to create an environment where creativity thrives. SCDF firmly believe in the usage of innovative and cutting-edge technology to boost operational effectiveness. Some of the outstanding projects that were developed include the all-terrain Light Fire Attack Vehicle, the usage of Water Mist technology in fire fighting and the modification of tracked vehicles to combat bush fires. These innovations have enhanced our operational effectiveness.

Context & Constraints:

Nil

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

SCDF has introduced a multitude of programmes to equip the population with knowledge and skills to deal with emergencies. SCDF has in place the Community Emergency Preparedness Programme (CEPP), which is a modular-based programme that provides both theory and practical training in First-Aid, Cardio-Pulmonary Resuscitation, Fire Safety and Casualty Evacuation, Emergency Preparedness and Emergency Preparedness for Unconventional Threats. Complementing the CEPP are community exercises with counter terrorism themes that are conducted at residential heartlands to sensitize the public to realities of such threats, and more importantly, to help them pick up essential skills and knowledge to deal with emergencies.

Context & Constraints:

Nil

Priority for action 4

Reduce the underlying risk factors

Core indicator 1

Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Description:

Singapore is relatively free from natural disasters due to its geographical location. However, there is study on-going on the impact of climate change on Singapore.

Context & Constraints:

Nil

Core indicator 2

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

At times of disasters, impacts and losses can be substantially reduced if individuals and communities are well-prepared. Besides equipping the population with Emergency preparedness knowledge and skills, SCDF also conducts regular community exercises within the residential heartlands. These exercises which are based on disaster and terrorism incidents serve to practice the residents and familiarise them with the procedures and actions that they need to undertake individually or collectively to ensure their survival should an incident occur. In-place Protection, First Aid, CPR and Firefighting Validation Booths are set up to test the residents' skills in emergency preparedness.

Context & Constraints:

Nil

Core indicator 3

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Business continuity plans are in place in most organisations.

Context & Constraints:

Nil

Core indicator 4

Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

The prevention of fires is also a cornerstone in SCDF's strategy to ensure a safe and secure Singapore. An important means of achieving this is through the administration of the Code of Practice for Fire Precautions in Buildings, commonly known as the Fire Code. This has been instrumental in establishing the high standards of fire safety in Singapore.

The Building and Construction Authority of Singapore has strict building codes and also conducts regular checks on buildings to ensure their compliance.

Context & Constraints:

Nil

Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

Nil

Context & Constraints:

Nil

Core indicator 6

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Description:

The National Critical Infrastructure Authority(NCIA) of Singapore is responsible to assist major buildings and infrastructures risk assessment.

Context & Constraints:

Nil

Priority for action 5

Strengthen disaster preparedness for effective response at all levels

Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Nil

Context & Constraints:

Nil

Core indicator 2

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

The SCDF has developed a comprehensive set of emergency preparedness plan which includes the Community Emergency Preparedness Programme, conducted community exercises, developed the civil emergency handbook to members of public

Context & Constraints:

Nil

Core indicator 3

Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

Nil

Context & Constraints:

Nil

Core indicator 4

Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:

The tsunami early warning system is able to receive data in real-time from more than 20 seismic stations in the region.

Context & Constraints:

An important component of an effective tsunami early warning system is rapid access to an extensive observation network comprising ocean buoys and seismic and tidal stations in the region. The high costs and logistics of operating ocean buoys are a challenge to countries in the region

Drivers of Progress**a) Multi-hazard integrated approach to disaster risk reduction and development****Levels of Reliance:**

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?:

Yes

If yes, are these being applied to development planning/ informing policy?:

Yes

Description (Please provide evidence of where, how and who):

Singapore has completed the tsunami risk assessment study and has identified several unprotected beach areas that may potentially be impact by tsunami, although the impact may be mild.

b) Gender perspectives on risk reduction and recovery adopted and institutionalized**Levels of Reliance:**

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/ little done to address it

Description (Please provide evidence of where, how and who):

Nil

c) Capacities for risk reduction and recovery identified and strengthened

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):

The SCDF has a multitude of programmes to equip the population with knowledge and skills to deal with emergencies.

d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Nil

e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):

Essential firms are identified and engaged in all government business continuity plan.

f) Contextual Drivers of Progress

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/ little done to address it

Description (Please provide evidence of where, how and who):

Nil

Additional context specific drivers of Progress # 1

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/ little done to address it

Drivers of Progress:

-- not complete --

Description (Please provide evidence of where, how and who):

Nil

Future outlook

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Overall Challenges:

The high cost and logistic preparedness involved may not be warranted due to Singapore's low risk of natural disasters.

Future Outlook Statement:

The National Environment Agency will continue to provide close monitoring and early warning of any natural disasters in the region that may have potential impact on Singapore.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Overall Challenges:

Nil

Future Outlook Statement:

The SCDF's effort will continue through the provision of humanitarian assistance for major overseas disasters, active participation in regional and international forums and the conduct of international courses for our overseas counterparts.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Overall Challenges:

Nil

Future Outlook Statement:

Nil