

Asian Conference on Disaster Reduction
12TH – 14TH Nov 2008, Bali, Republic of Indonesia

Strategies in Support
of **Hyogo Framework for Action**

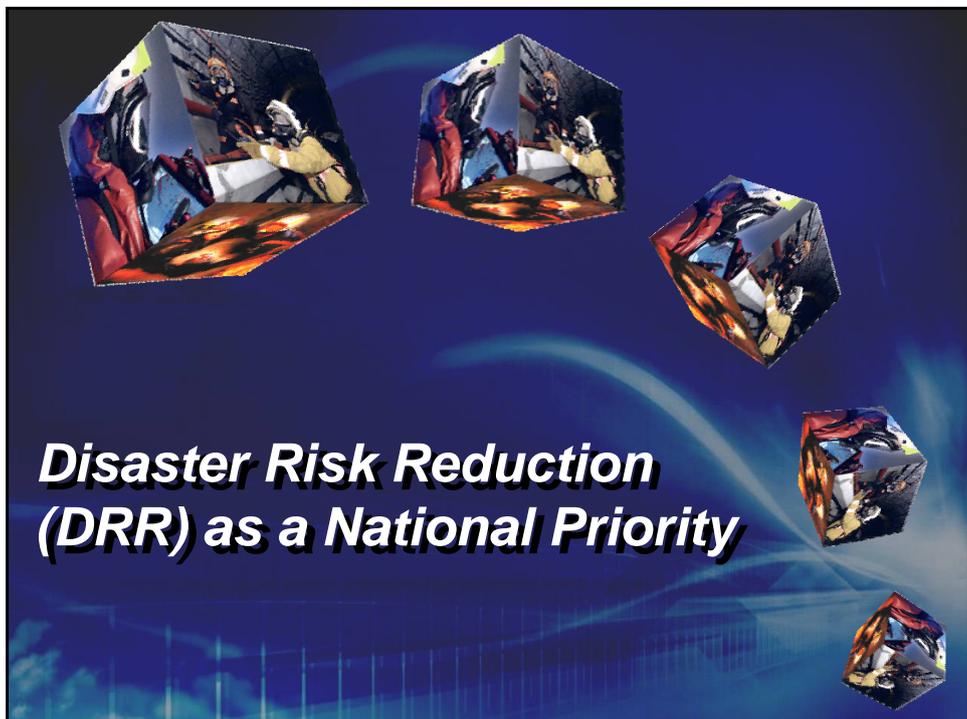
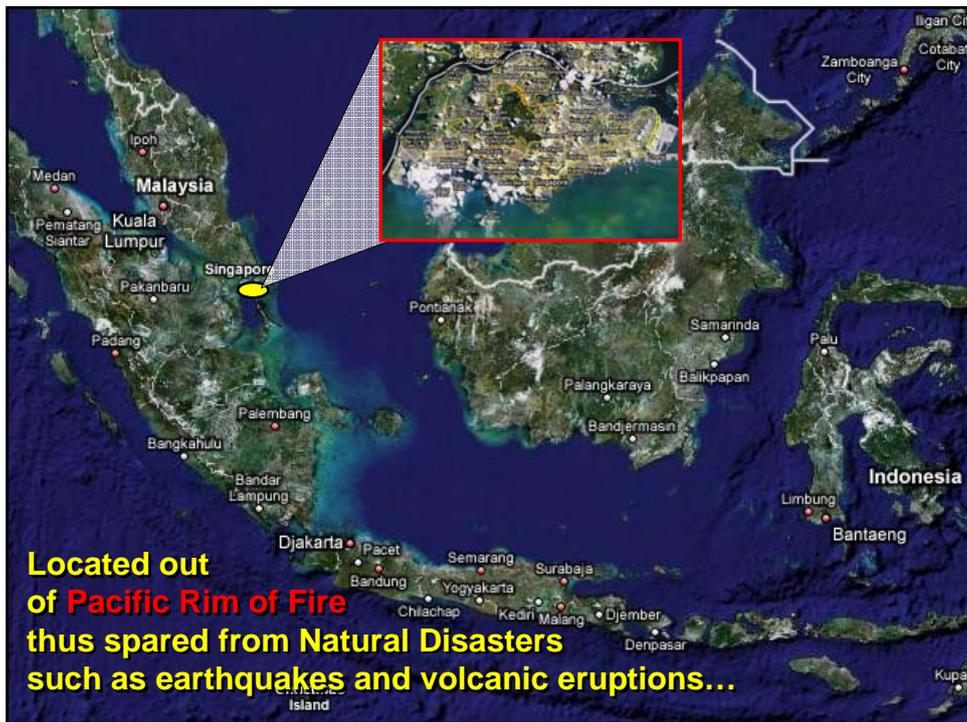
THE LIFE SAVING FORCE...



SINGAPORE ...



- Total Land Area: 707 sq km
- Population: 4.6 million
- Second most densely populated nation



Civil Emergencies (CE)

- SCDF as the **Incident Manager** for CE and overall in-charge of the multi-agency response under the Ops CE Plan



- Ops CE Plan was promulgated
 - **National** contingency plan
 - Integrated **multi-agency** incident management and response



OPS CE Plan - Key Scenarios

- Major fires
- Collapsed buildings and structures
- Major transport incidents
- Major industrial accidents
- Toxic industrial chemical release
- Chemical, Biological, Radiological, Explosives (CBRE) incidents





PREVENTION THROUGH RISK MONITORING FRAMEWORK

Quantitative Risk Analysis (QRA)

- Comprehensive Risk Assessment Approach
- Address worst plausible scenario
- Key Installations and High-Risk industries

Operations Terrain Mapping (OTM) System

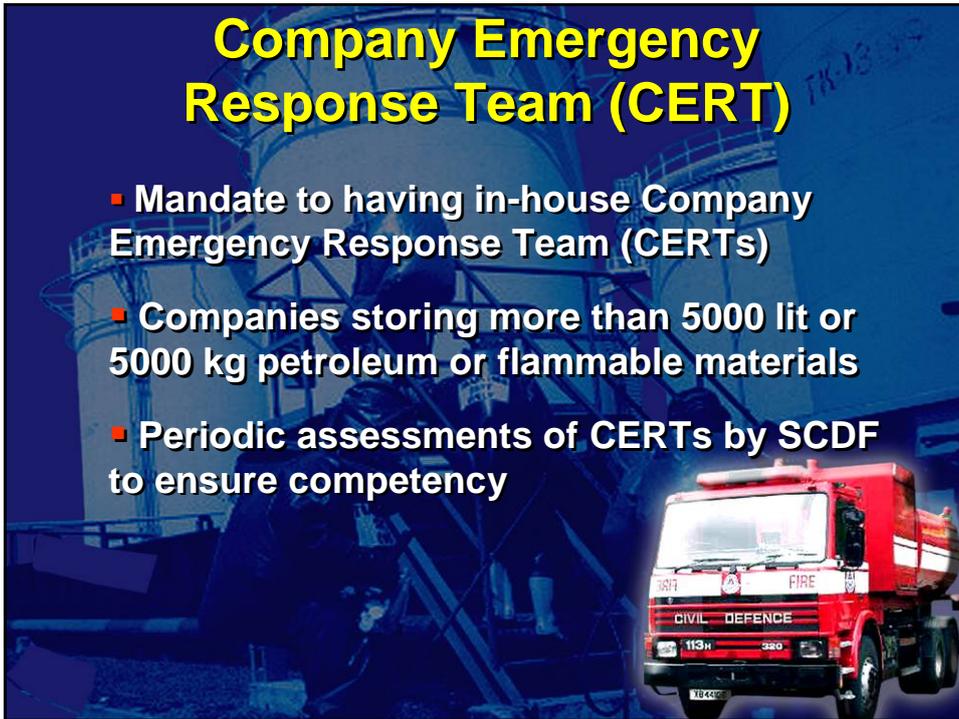
- Identify operational vulnerabilities and interests at the ground
- Geographical, terrain-related, infrastructural and social-demographical information
- Essential planning and conduct of civil defence operations
- Develop expert local knowledge

Security Sensitive Material (SSM) Data Centre

- Provides comprehensive overview of all sensitive HazMat in Singapore
- Operates on 24/7 basis to track movement of SSM
- Important tool in preventing diversion of SSM for illegal or unauthorised use

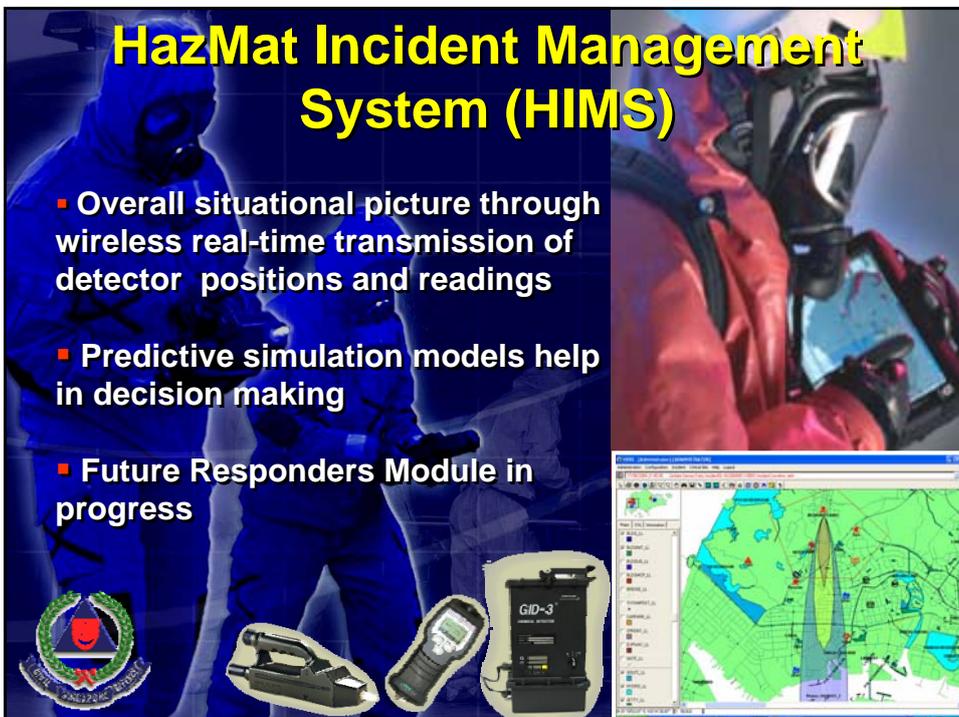
Company Emergency Response Team (CERT)

- Mandate to having in-house Company Emergency Response Team (CERTs)
- Companies storing more than 5000 lit or 5000 kg petroleum or flammable materials
- Periodic assessments of CERTs by SCDF to ensure competency



HazMat Incident Management System (HIMS)

- Overall situational picture through wireless real-time transmission of detector positions and readings
- Predictive simulation models help in decision making
- Future Responders Module in progress





Our Innovations ...



Singapore Civil Defence Force





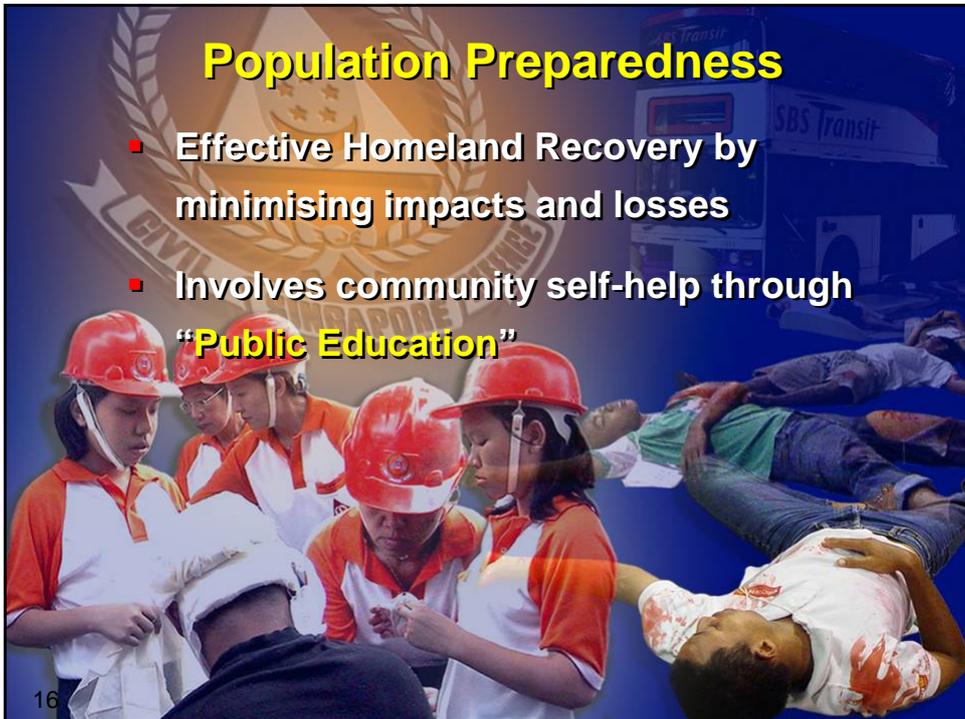
Water Mist Technology



All-Terrain Fire Fighting Vehicle

Population Preparedness

- Effective Homeland Recovery by minimising impacts and losses
- Involves community self-help through **“Public Education”**



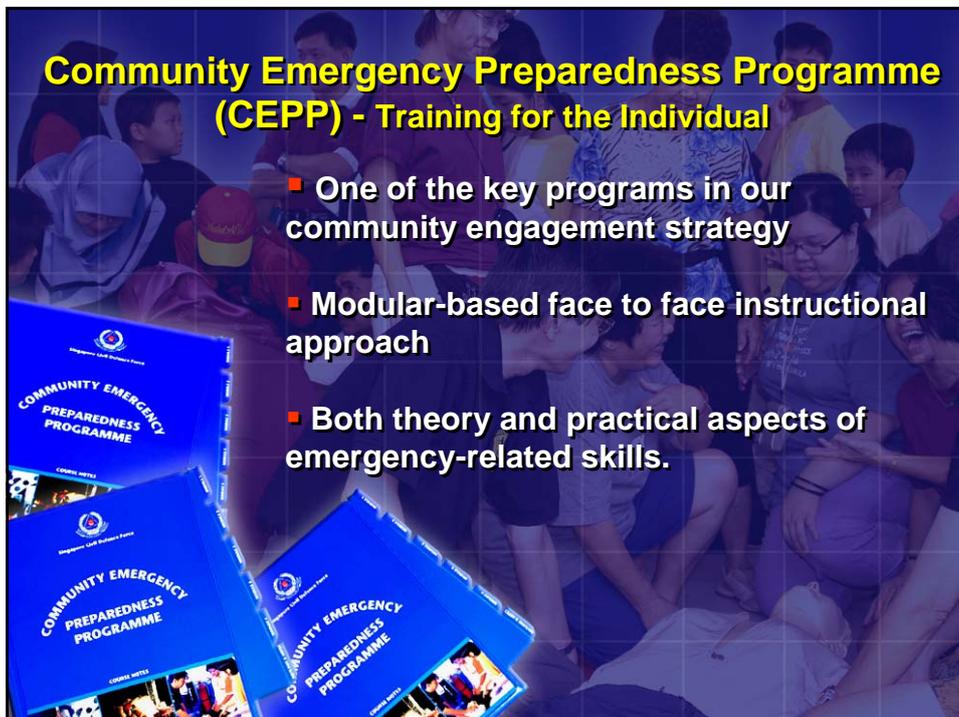
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Strategic Partners in Community Engagement

- **People's Association and Grassroots Organizations**
 - Civil Defence Executive Committee (CDEC)
 - Resident Committee (RC) to reach out to the residential community
- **National Fire and Civil Emergency Preparedness Council (NFEC)** with closer ties in industries and commercial groups
- The **Ministry of Education** in preparing the school population for emergencies.

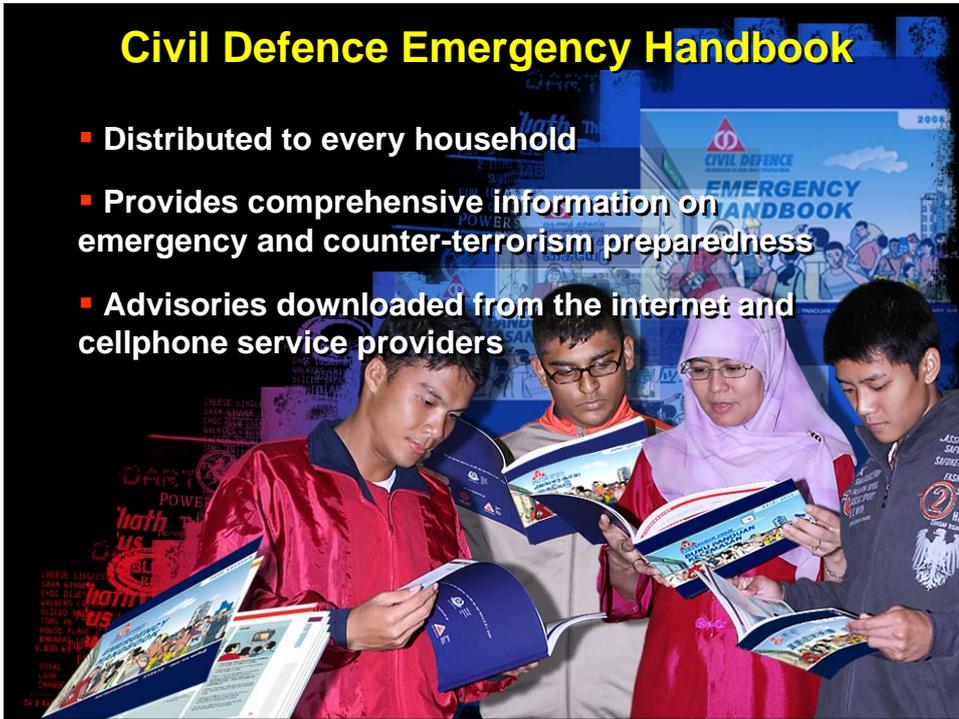
Community Emergency Preparedness Programme (CEPP) - Training for the Individual

- One of the key programs in our community engagement strategy
- Modular-based face to face instructional approach
- Both theory and practical aspects of emergency-related skills.



Civil Defence Emergency Handbook

- Distributed to every household
- Provides comprehensive information on emergency and counter-terrorism preparedness
- Advisories downloaded from the internet and cellphone service providers



Targeting the Individuals

Harnessing on Technology

Ready Mobile

- Download emergency advisories
- Animation clips/ text information
- Access them via mobile phones anytime.

Online Readiness Self-Assessment Tool

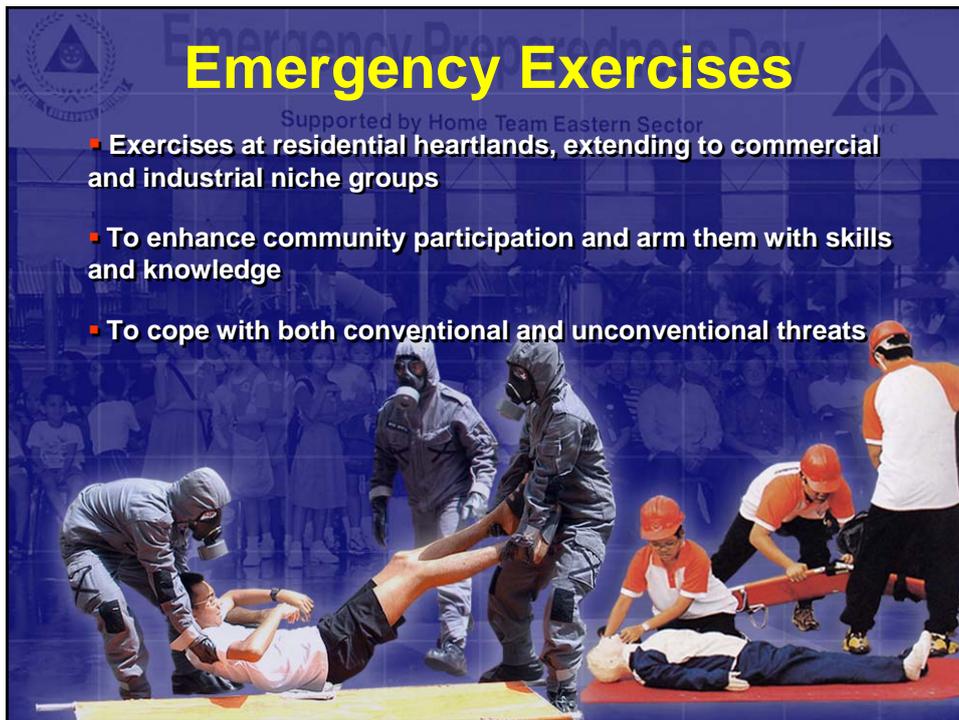
- Hosted on SCDF's webpage
- Awareness, Preparedness and Confidence
- Self-assessment on individual's state of readiness



Emergency Exercises

Supported by Home Team Eastern Sector

- Exercises at residential heartlands, extending to commercial and industrial niche groups
- To enhance community participation and arm them with skills and knowledge
- To cope with both conventional and unconventional threats

A photograph showing an emergency exercise. Several individuals in grey protective suits and masks are attending to a person lying on a stretcher. Other people in orange and white uniforms are also present, some appearing to be providing medical assistance or observing the procedure. The background is a blurred crowd of people.

Emergency Planning Roadmap

- **Structured roadmap** guides the grassroots organisations in developing a constituency contingency plan
- To **prepare and plan** for major civil emergency situations, such as a major fire, bomb explosion, building collapse and chemical incident.

A photograph showing a man in a white shirt and tie talking on a mobile phone. In the foreground, a woman in a pink shirt is looking at a map or brochure. In the background, a group of people, including children, are walking. The background is a blue-tinted cityscape with tall buildings.



Code of Practice for Fire Precautions in Buildings

- 8 volumes catering to fire safety needs of specific groups
- Regular reviews and updates to ensure it remains current and relevant

Public Warning System (PWS)



- **Strategic outdoor locations**
- **Comprehensive island-wide acoustical coverage.**
- **Provide early warning to the general population of any imminent threats**

Strengthening Disaster Preparedness at All Levels

Exercise Northstar VI



Largest maritime emergency drill

Reality and overcoming challenges in a concerted response from various agencies

A more prepared Singapore

Marina South Pier

Tanah Merah Ferry Terminal

Singapore

SAR Aquarius

2 mi
2 km

Selat Pandan
Pulau Bukom

The slide features a map of Singapore with several text overlays in yellow and black. The text highlights the scale of the drill, the challenges involved, and the goal of a more prepared Singapore. Two inset photographs show a large white ship named 'SAR Aquarius' and a helicopter in flight.

ASEAN Regional Disaster Emergency Exercise

- **Third ASEAN Regional Disaster Emergency Response Simulation Exercise (code-named ARDEX-07) hosted by SCDF on Oct 07**
- **To facilitate a close and effective collaboration amongst member countries in tackling national disasters in these countries.**

Heavy Urban Search and Rescue (USAR) Certification



- SCDF's Operation Lionheart Contingent
- **First Team in Asia** to earn Heavy USAR Certification, Jan 2008
- Certification by International Search and Rescue Advisory Group (INSARAG)

OVERSEAS MISSIONS ...

OPERATIONS LIONHEART

● **10 overseas missions since 1990.**

- 8 Oct 2005 – Earthquake Muzaffarabad, Pakistan
- 16 May 2008 - Earthquake Sichuan, China
- 21 Sep 1999 - Earthquake Tai Chung County, Taiwan
- 26 Dec 2004 – Tsunami Phuket, Thailand
- 26 Dec 2004 – Tsunami Aceh, Indonesia
- 11 Dec 1993 - Bldg Collapse KL, Malaysia
- 16 Jul 1990 – Baguio City Earthquake Philippines
- 18 Aug 2005 - Vegetation Fires Sumatra, Indonesia
- 27 May 2006 – Earthquake Central Java, Indonesia
- 28 Mar 2005 – Earthquake Nias Island, Indonesia

Scale 1:48,000,000
Azimuthal Equal-Area Projection

Collaboration at Regional & International Level

- Continuous efforts through the provision of humanitarian assistance for major overseas disasters
- Active participation in forum
- Conduct of international courses for our overseas counterparts.

