



Make your business disaster & climate resilient: Final report

Da Nang, Viet Nam, 27-28 May 2015



*The Director of Da Nang Climate Change Coordination Office
Dr Dinh Quang Cuong explains the city's flood risk.*

"Economic losses from disasters are out of control and can only be reduced in partnership with the private sector which is responsible for 70% to 85% of all investment worldwide in new buildings, industry and small to medium sized enterprises."

- **UN Secretary-General Ban Ki-moon**

Main outcomes

The business case for disaster and climate risk management was reaffirmed

More than 30 senior representatives from tourism, industry and the services sector – the key areas of the Da Nang economy – unanimously stated that disaster and climate risk is a genuine threat to the future of their businesses.

Various ‘captains of local industry’ – including CEOs, Deputy CEOs, Chief Engineers, and Financial Controllers – convened for the workshop and reaffirmed their conviction in the business case for disaster and climate risk management for their various enterprises. The fact that such a cohort gave up a



whole day of their busy schedules to explore strengthening their business resilience is testament to that.

Participants agreed that investing in disaster and climate risk management represented an opportunity to strengthen resilience, competitiveness and sustainability. Such investment was not regarded as a cost. This view is strengthening. Da Nang’s business sector increasingly faces a complex and often unpredictable set of hazard and risk challenges.

Da Nang Steel Joint Stock Company and Furama Five-Star Resort are two rather different enterprises. Yet they are typical of the local businesses in the decisions they have made and the conclusions they have reached: Investment to protect their business is paying off.

This engagement with the private sector in Da Nang was timely. It came just two months after the Third World Conference on Disaster Risk Reduction, in Japan. The new Sendai Framework for Disaster Risk Reduction identifies the private sector as a central actor of global efforts to reduce disaster and climate risk. This strategic partnership is already a reality in hazard-prone Da Nang.

Da Nang businesses shared several good practices of disaster risk management

Several examples of practical disaster risk management were shared as ‘live case studies’ among the local private sector. In the lead were Da Nang Steel Joint Stock Company and Furama Five Star Resort.

➤ Case Study 1



The Da Nang Steel Joint Stock Company produces 100,000 tonnes of steel a year and employs 310 people. It sits in an industrial zone NE of the city. In the past it has experienced heavy losses from major hazards, such as the 2006 Typhoon Xangsane. The damage sustained prompted a strengthening of the company’s infrastructure (ie various production facilities, warehouses and offices). The refitted buildings are designed to withstand storms of a similar strength to Xangsane. However, the nature of steel production means that the company’s production facilities are not as enclosed – and hence strong –

as the neighbouring rubber producer, according to the firm’s Deputy Director.

The Joint Stock Company – 70% owned by the private sector and 30% by the Government – has moved to a more environmentally friendly business model that is also helping the enterprise’s bottom line. New technology – introduced by one of the company’s Italian partners – has cut electricity costs by 10% meaning the business model is gentler on the environment. This represents a huge saving. The company’s USD500,000 a month power bill makes up 45% of its total running costs.

➤ Case Study 2

The Furama Five-Star Resort was the first of the city’s string of luxury hotels to open in 1997. The Hong Kong franchise now has 197 rooms and is regularly filled with visitors, mostly from neighbouring countries around Asia.

Since it opened, 10 typhoons have caused significant damage, in particular Typhoon Xangsane in 2006. This cumulative experience has prompted the resort to increasingly base its disaster and climate risk management plan on a compact with rather than against nature.



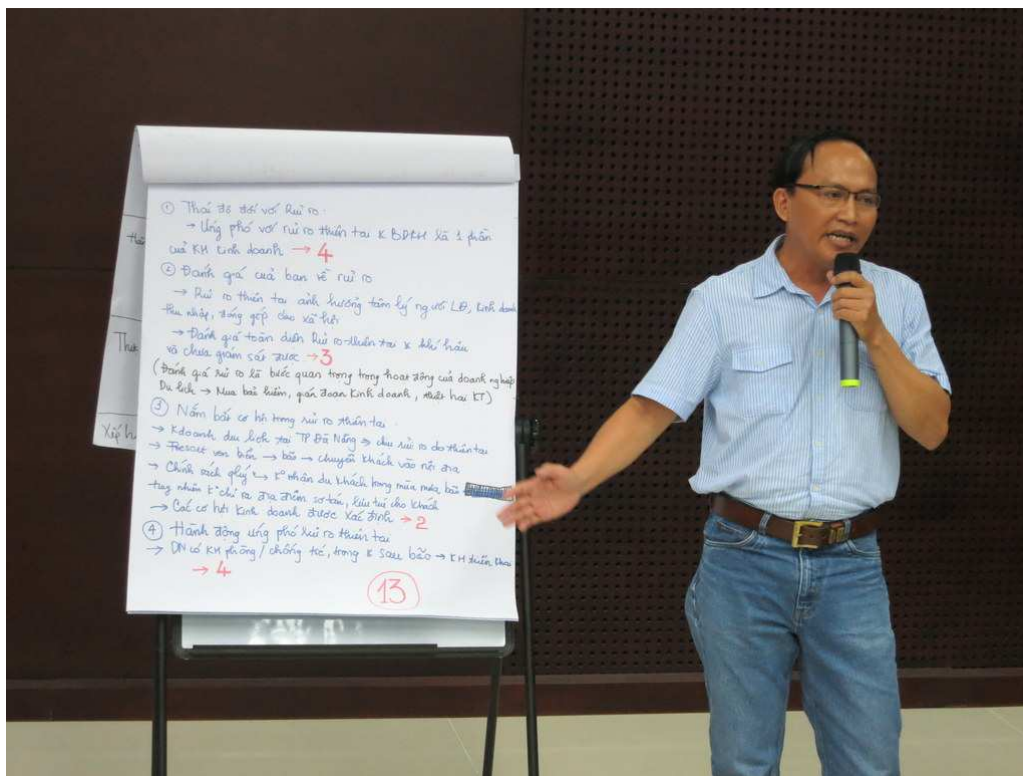
“We agree to the benefits of the sea by being located on the coast but by doing so we have to agree to reduce or accept some of the risks that this entails,” the resort’s Chief Engineer said. “Our top priority is the safety of our guests and staff, followed by the protection of our infrastructure. We have paid in losses in the past but in so doing we have learnt a lot.”

A stronger design of structures has been adopted and more protective measures are in place to protect the hotel from storms of a similar nature to Xangsane. The hotel has stronger evacuation procedures and better contingencies to deal with losses of power, water and food.

A system of detailed preparedness planning began in July 2014. This includes a strong partnership with the local tourism association, city authorities and engagement in the Typhoon Prevention Committee.

The hotel management also recognizes that tourism development has damaged natural storm buffers such as sand dunes and coastal vegetation and that this needs to be reversed. Significant concreting of the area has also increased flood risk during torrential rain. Coastal erosion is increasing the risk of sea inundation.

Paradoxically, of some concern is the fact that increasingly intense heatwaves during the hot season are affecting the comfort of holiday makers whose very reason to be there is for the sun.



Businesses accepted the need to move beyond preparedness to stronger disaster risk management

The regular hazards that affect Da Nang – typhoons, floods and heatwaves – have generated a high awareness among the business community. However, despite impressive preparedness planning

businesses will remain exposed and vulnerable to hazard patterns that are becoming more unpredictable, frequent and intense.

The workshop opened up new avenues of strategic thinking. Business representatives agreed that they needed to move from a reactive approach that manages disasters to a more proactive approach that manages disaster risk. They pointed out, though, that this is challenging.

Business representatives asked themselves increasingly tough and explicit questions as the workshop progressed. These included: How resilient is my organization to disaster and climate risk? How would my business cope with even more powerful storms or floods?

The forum strengthened public-private partnership in Da Nang



The Da Nang People's Committee Climate Change Coordination Office – the local partner for the forum – has a good, emerging relationship with local business. The forum took it to a new level. Key business sectors such as tourism, industry and services want to strengthen their partnership with the Climate Change Coordination Office.

Enterprises have an interest in strengthening their own resilience **and** that of the local economy in general. The increasingly interconnected nature of the Da Nang economy – as well as the national and international economy beyond – makes the case for stronger public-private partnerships compelling.

Da Nang businesses recognized that disaster risk does not stop at the factory gate or the office door. Their businesses are increasingly dependent on infrastructure – particularly bridges – and urban systems run by utilities and the public sector, such as power and water supplies. Damage to transport and energy networks, the port or to the neighbourhoods where employees live have interrupted business and imposed additional costs in the past.

Small businesses that serve local markets have been affected more directly by localized disasters, such as minor flooding, in particular. Bigger companies have often been able to 'ride out' such disasters. These corporations are relatively mature in their risk management strategies but recognize that gaps exist.

The more resilient businesses in the forum – often simply those with more capacity – are managing uncertainty better. However, their approach is still focused on disaster preparedness and managing disasters rather than proactively managing their disaster risk.

The tourism and services sector – which generates about 50% of the Da Nang economy’s GDP – has emerged as a leader on disaster and climate risk resilience. Senior representatives from several major hotel chains were present and expressed a strong interest to work in partnership with the Climate Change Coordination Office on a sector-wide resilience agenda. Da Nang city officials, with UNISDR GETI support, plan to target the sector in efforts to strengthen disaster and climate resilience.

Disaster and climate risk reduction as a business opportunity as an emerging concept in Viet Nam was strengthened

The forum convinced Da Nang businesses of the potential of market opportunities in disaster risk reduction. Competition was regularly cited as a major risk. Business leaders said the ability to ‘keep trading’ during and after a disaster was a major competitive advantage in Viet Nam.

Examples of businesses establishing a viable market niche supplying disaster and climate risk reduction products and services stimulated significant interest. Examples were shared from other parts of the world such as Fiji, Japan, and New Zealand. Businesses are beginning to discover that opportunities exist in ‘resilient proofing’ new and existing infrastructure, buildings and supply chains.

UNISDR proved itself a credible partner for the Climate Change Office and Da Nang businesses



All materials for the forum were translated into Vietnamese ahead of the workshop, which was a positive early indication of the strong commitment from the local partner. This material will now be used as a resource within Da Nang and – if requested – other cities in the country.

The Director of the Climate Change Coordination Office Dr Dinh Quang Cuong agreed that UNISDR’s Global Education and Training Institute (GETI) should conduct a Trainer of Trainers (ToT) on the Make Your

Business Disaster and Climate Resilient modules. This will be for selected officials from the Climate Change Office and other related development city departments. The ToT will enable the city to increase its engagement with the private sector on disaster and climate resilience. The initiative may also open up more opportunities for public-private sector partnerships to strengthen resilience. The ToT will take place in September/October 2015.

Business representatives, particularly those from the tourism sector, also requested that UNISDR stay engaged to support local efforts to strengthen business continuity and disaster risk management.

UNISDR GETI's experience of working with the private sector in various countries on practical challenges and providing examples of tools and good practice from around the world was identified as a useful resource for Da Nang.



Key lessons for UNISDR

- The experience in Da Nang represents the ideal model for future engagement elsewhere. In short, this is:
 - ✓ Identify and work with/through a local partner who can continue to drive the issue in the future with UNISDR ONEA-GETI support if needed
 - ✓ Introduce the material and tool at a one-day forum through interpretation
 - ✓ (If of interest) Conduct a ToT with participants convened and selected by local partner; materials are adapted and translated (if not already done) for local use

- ✓ Future trainings are led and run by local partner in local language with UNISDR GETI available for specific (limited) sessions and ongoing advice and the brokering of additional resources (if required)
- Some of the material did not translate easily and was also, perhaps, too conceptual in parts. The clear feedback from the Climate Change Coordination Office is to make it shorter and simpler as by way of an introduction. The local partner and businesses can then adapt and go deeper as they progress.
- Senior private sector representatives indicated that one day is the maximum period they can justify to be away from their offices. More time can be devoted to on-site specific work on business disaster and climate resilience as a follow up. This reflects feedback from the previous forum in Tblisi, Georgia. As such the course material will be amended so that there is a one-day and a two-day version available.
- The forum was an excellent example of how UNISDR's regional offices – in this case UNISDR's Office for Asia Pacific, in Bangkok – can increasingly use ONEA-GETI as a capacity building resource. This feeds into the emerging post-Sendai agenda of more practical support to the private sector, local authorities and governments to reduce disaster risk.
- It was agreed that the Climate Change Coordination Office would assist in approaching local hotels to be a part of a series of UNISDR case studies from around the world that demonstrate business resilience in action.
- Participants acknowledged the relevance of the workshop, made possible because of the long-term partnership of the Republic of Korea's Ministry for Public Safety and Security (MPSS) and the City of Incheon in staging the forum.

The Da Nang context

Typhoons, floods and – increasingly – heatwaves regularly affect Da Nang. Typhoon Xangsane, which hit the city in September 2006, was the strongest storm in 40 years. Da Nang lost the equivalent of 50% of the city's GDP for the previous year. USD 300 million of direct economic losses were sustained, with roads, telecommunications and power supplies all affected. Twenty-six people were killed in the city.

Throughout Central Vietnam the storm destroyed or damaged 320,000 homes, downed thousands of trees and power lines, and flooded major streets. Ahead of the storm, 300,000 people were evacuated. In the aftermath, floods affected 1.3 million people.

Da Nang – a city of 1.1 million people – is Central Viet Nam's major port and economic and educational hub. It is ringed by mountains on one side and the South China Sea on the other. The city is the most urbanized of any in Viet Nam.

In recent years Da Nang has developed rapidly with many new buildings and several beachfront resorts. It is a major tourist destination and the gateway to the nearby UNESCO World Heritage sites of the imperial city of Hue, the old town of Hoi An and the My Son ruins.

Da Nang installed 10 early tsunami warning stations throughout the city after the 2011 Japan earthquake. The stations are the first of their kind in Viet Nam.

The city has a diversified business base. It includes industries such as aquaculture, marine fishing, machinery, steel, rubber, electrics, chemicals, shipbuilding, and textiles. Da Nang produces goods such as fabric, clothes, bricks, fertilizer, cement, soap, paper, and medical tablets.

Foreign investment has increased significantly. However, the state sector remains very influential and includes several corporations headquartered in Ha Noi.

The City is a part of the Rockefeller Foundation's 100 Resilient Cities Initiative, of which UNISDR is a partner.

UNISDR & its Office for Northeast Asia and the Global Education and Training Institute

The UN Office for Disaster Risk Reduction (UNISDR) was established in 1999. Its main role is to ensure the implementation of the new Sendai Framework for Disaster Risk Reduction: 2015-2030. As part of that role UNISDR coordinates disaster risk reduction within the UN system.

UNISDR's Office for Northeast Asia and Global Education and Training Institute (ONEA-GETI) works in line with the Sendai Framework to support "a substantial reduction of disaster risk and losses".

It does this by focusing on two key themes of the Framework. First, ONEA-GETI supports local and national capacity building to strengthen disaster resilience. Second, the Institute adopts an inclusive approach to disaster risk reduction. It engages with various partners, particularly city and ministerial officials, the private sector, training institutes, academia, and sister UN agencies and other international organizations.

UNISDR's ONEA-GETI was set up in 2010 through cooperation with the National Emergency Management Agency (now the Ministry of Public Safety and Security) of the Government of the Republic

of Korea and the City of Incheon, where it is based.

The office was established to promote disaster resilient societies through global advisory and training initiatives that support and develop a new cadre of professionals in disaster risk reduction and climate change adaptation.

The Global Education and Training Institute delivers practical support. Each participant emerges with initial headline resilience action plans for their country, city, business, or organization. In 2014, GETI facilitated 20 forums in nine countries for more than 800 practitioners and policymakers from 36 nations. 2015 will see more people and countries reached.

UNISDR's Global Private Sector Partnership

UNISDR has a thriving global partnership with business via the Private Sector Partnership initiative. It works with private sector leaders who are pursuing and promoting risk-sensitive planning and investment to protect business and society from disasters. The partnership has produced several initiatives and tools that demonstrate disaster risk reduction is an investment and a business opportunity rather than a cost. This forum was held as part of UNISDR's global strategy of engagement with business, which is a key partner under the Sendai Framework for Disaster Risk Reduction.

Making your Business Disaster and Climate Resilient
Da Nang, Viet Nam, 27-28 May 2015

Day One	City briefing & field assessment of business risk
8.30 – 11.30	Briefing on Da Nang City’s hazard & risk profile & specific challenges for businesses – Da Nang People’s Committee Office, Director of Climate Change Coordination Office Dr Dinh Quang Cuong
11.30 – 13.00	Lunch
13.00 – 15.00	Da Nang Steel Joint Stock Company site visit – field assessment of disaster & climate risk, Deputy Director Mr Pham Quy Giap
15.15 – 17.15	Furama 5-star Resort Da Nang site visit – field assessment of disaster & climate risk, Chief Engineer Mr Bui Van Ha; Financial Controller Mr Le Van Tung

Day Two	Protecting your business from disaster and climate risk
8.00 – 8.30	Welcome & Introduction Forum Overview
8.30 – 9.30	Self-assessment of your business's disaster & climate risk
9.30 – 10.15	Mapping your business's past, current & future hazards
10.15 – 10:30	Coffee
10:30 – 11.30	Mapping your business's other risks & plotting your Risk 'Heat Map'
11.30-13.30	Lunch
13.30 – 15.30	Comparing disaster trends for Da Nang & globally Comparing business risk profiles for Da Nang & globally
15.30-15.45	Coffee
15.45 – 17.00	Case study examples of resilient business from around the world
17.00-17.30	Closing ... way forward

Participants List

No.	Participant	Business
1	Đình Lê Quân	Da Nang GIZ – Nexus
2	Hồ Nguyễn Quốc Dũng	Department of Irrigation and Flood Control of Da Nang
3	Nguyễn Duy Tiên	Son Tra Eco - Toursim Sea Board
4	Nguyễn Thị Kim Thủy	An Khe Rattan and Bamboo Wares Cooperative
5	Nguyễn Khánh Sơn	An Khe Rattan and Bamboo Wares Cooperative
6	Phạm Quang Vinh	Da Nang Rubber Joint – Stock Company
7	Nguyen Van Doan	Da Nang Rubber Joint – Stock Company
8	Phan Văn Sáu	Da Nang Steel Joint – Stock Company
9	Mai Xuân Hiệp	HAGL Plaza Da Nang
10	Lê Viết Tần	Da Nang Plastic Joint – Stock Company
11	Nguyễn Minh Chánh	Da Nang Seaproducts Import - Export Corporation
12	Nguyễn Văn Phú	Daiwa house Vietnam Co.,Ltd
13	Đỗ Thái Hồng	Vietnam Japan Chip Corporation Ltd.(VIJACHIP)
14	Nguyễn Quang Vũ	Prudential Insurance Vietnam Co. Ltd
15	Phạm Văn Hoàng	Ba Na Hills Resort
16	Lê Văn Lý	Da Nang Water Supply Company (Dawaco)
17	Nguyễn Lương Thắng	Pacific Steel Joint – Stock Company
18	Nguyễn Phước Châu	Environmental Protection Agency
19	Đình Duy Chính	Hoa Cam Industrial Zone Investment Joint – Stock Company
20	Nguyễn Anh Tuấn	Massda Land Co.,Ltd
21	Lý Quốc Phong	Fusion Maia Resort
22	Phan Huy Hoàng	Novotel Danang Premier Han River
23	Nguyễn Thị Yên	Saigontourist Holding Company
24	Trương Tý	Hotel Grand Mercure Danang
25	Nguyễn Đình Đình	Centara Sandy Beach Resort Da Nang
26	Trương Thị Hiệp	InterContinental Hotel Danang Sun Peninsula Resort
27	Nguyễn Thị Yến Linh	The Steering Committee of Flood and Storm Control, Search and Rescue in Da Nang
28	Lê Xuân	Centara Sandy Beach Resort Da Nang
29	Bùi Văn Hà	Furama Resort Da Nang

30	Lê Văn Thịnh	Daeryang Vietnam Co.,Ltd
31	Nguyễn Nam Thắng	Vietnam Dairy Products Joint – Stock Company (Vinamilk)
32	Nguyễn Thị Thùy Trang	Apple Film Co.,Ltd
33	Nguyễn Thị Ngọc	Vinaamsteel Corporation