

EXECUTIVE SUMMARY

The Urban Resilience Summit: Innovation, Investment, Collaboration

December 3rd 2014 • Raffles Hotel, Singapore

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THE
ROCKEFELLER
FOUNDATION



INTRODUCTION, OVERVIEW & KEY TAKEAWAYS

In an increasingly fast-changing and interconnected world, fostering resilience to withstand unexpected shocks is becoming more important. The effects of the financial crisis in 2008 still linger today. More recently, natural disasters of historic proportions in Asia and the re-emergence of geopolitical turmoil in Eastern Europe and the Middle East highlight the need for more resilient societies. Building more robust and resilient cities is key, and was the subject of The Economist Events' Urban Resilience Summit held in Singapore on December 3rd.

KEY TAKEAWAYS ON URBAN RESILIENCE:

- **Resilience is complex:** The stresses and shocks cities face manifest in different ways, and the concept of resilience is an evolving and moving target. How these population centres will fare over the long run will depend on the joint efforts of governments, businesses and civil society. With such complexity, however, comes the risk of paralysis in search for comprehensive solutions.
- **The here and the now:** Regardless of the nature of the threat—whether it is urgent or remote from spatial and temporal perspectives—the fact of the matter is that there is an urgent need to build resilience now. Urbanisation is rendering increasingly more people vulnerable to shocks as populations concentrate in geographically smaller areas. Crisis is the new normal.
- **Public-private cooperation:** The age-old question of the role the public and private sectors play are as relevant to resilience strategies as they are to the provision of other public goods. The scarcity of public resources and expertise necessitate the participation of firms and civil society. At the same time, government is needed to create an enabling environment for resilience initiatives to grow.
- **Asia is particularly at risk:** Many of the region's major cities remain under-developed and under-insured. Congested infrastructure, inadequate public services and insufficient jobs are creating social divides. Asian cities located along coastlines, under typhoon belts and on top of earthquake-prone fault lines face the added pressures associated with climate change and natural disaster.

KEYNOTE INTERVIEW: THE ECONOMICS OF URBAN RESILIENCE IN ASIA

“The challenge is getting more investment in resilience as the returns on investments remain low.”

Donald Kanak
Chairman
Prudential
Corporation Asia

In the past two decades, close to two-thirds of the world's losses from disasters have been recorded in East Asia. This staggering figure as articulated by Donald Kanak of Prudential Corporation Asia, an insurance firm, highlighted two key points: one, that Asia is on the frontline of natural disasters; and two, that the region remains severely underprepared to withstand them. The trend is worrying. Losses from disasters have only grown over the past decade. What's more, Asia in general remains underinsured, reflecting in part the tremendous diversity of equity in the region and its relatively under-developed insurance industry.

Apart from the risks posed by natural disasters, the pressures associated with aging societies figure prominently in Asia. Indeed, the extent of the region's rapidly greying populations is often underappreciated, in Mr Kanak's view. Emerging markets such as Thailand and

Vietnam will soon face the same demographic stresses that the developed economies of Japan and Singapore already struggle with. Even the fast-growing populations of Indonesia and the Philippines are not immune, as improving life expectancy and falling birth rates accelerate the aging of their societies.

Going forward, a more resilient Asia will need innovative public and private insurance mechanisms tailored to the region's specific needs. The Philippine Risk Insurance Scheme for Municipalities, also known as 'PRISM', is one example. But perhaps more importantly, a change in mind-set is vital. Despite the fact that Asia has suffered greatly from natural disasters in recent years, a greater sense of urgency is still lacking. In the words of Mr Kanak, the biggest challenge in developing resilience is fighting the prevailing individualistic mentality that leads most to think that risks 'are not happening now, and do not affect me'.





"This won't work unless there's bottom-up governance."

Judith Rodin
President
The Rockefeller
Foundation

"The initiative is a multigenerational struggle to make cities resilient."

Michael Berkowitz
Chief Executive Officer
100 Resilient Cities

ANNOUNCEMENT: 100 RESILIENT CITIES – THE FUTURE RESILIENCE CAPITALS

The Rockefeller Foundation, a private philanthropic organisation, announced the second cohort of cities it will include in its 100 Resilient Cities initiative. Both Judith Rodin, the president of the foundation, and Michael Berkowitz, the Managing Director of the Rockefeller Foundation and President of 100 Resilient Cities, pioneered by the Rockefeller foundation, unveiled 35 new cities to supplement last year's first cohort of 32. The Initiative lays out a four-pronged strategy: putting in place a Chief Resilience Officer in member cities; supporting the development of a resilience strategy; facilitating the sharing of best practices; and connecting member cities to partners that can aid the implementation of their resilience strategies.

The wide array of cities selected this year is telling. Cities as rich as London, Singapore and Sydney were selected alongside the emerging metropolises of Chennai, Juarez and Kigali. The tremendous amount of diversity in terms of

population size, economic development and geographical location is a testament to the ever-changing nature of the threats cities face. Indeed, as he gave a brief update on the progress of last year's cohort, Mr Berkowitz said that one of the main challenges of resilience building is the complexity of the problems at hand. Another issue he highlighted was that the scalability of solutions has proven difficult.

Nonetheless, the addition of the second group of cities will help 100 Resilient Cities better meet its goals. Not only will there be more resources and best practices to go around, but, as more cities take part in these efforts, the public's awareness of the concept of resilience will also grow. The final cohort will be announced in 2015, bringing the total number of participating cities to 100. The enthusiasm city authorities have shown in joining 100 Resilient Cities is likely to remain strong—more than 300 applications were received in the second cohort alone!

BRIEFING: ECONOMIST INTELLIGENCE UNIT

The Economist Intelligence Unit (EIU) of the Economist Group, surveyed roughly 250 business executives around the world on the role the private sector plays in building urban climate resilience. The survey was conducted in August-September 2014 and more than half of the respondents have significant operations in Asia. The private sector's assessment of the impact of disparate threats differed, depending on whether they were asked to consider their operations, their markets or their supply chains.

A credible and urgent threat: The survey found that businesses now view urban risks that lie beyond the immediate impact of climate change as threats to their operations. To be sure, risks such as civil unrest, political instability and the growing wealth divide within cities are also areas of concern. From the Asian perspective, executives based in the region are particularly worried about the increasing stress on urban infrastructure.

Onus on governments: By and large, respondents said

that governments should still be the primary actors in responding to climate-related shocks. This includes efforts to address the breakdown of essential services and the loss of livelihoods. The internal mind-set of businesses with regard to similar efforts was evident in the survey, with executives prioritising measures to shore up the resilience of their own operations. Encouragingly, however, this mind-set may be shifting as 90% of executives acknowledge a role for businesses in resilience building.

Moving beyond CSR: Equally notable, the survey showed that reputational issues are no longer the main motivation for private investment in climate-based resilience building. Other factors including cost savings, improving productivity and strengthening competitiveness were ranked higher as perceived benefits of resilience strategies. With this in mind, it did not come as a surprise that respondents believe that the economic case for urban climate-resilience investments is strengthening.

"Cost is by far the biggest obstacle to building resilience."

Sumana Rajarethnam
Senior Analyst
Research Solutions
**The Economist
Intelligence Unit**



"We worked very hard to bring in European Structural Funds to give relief to the people."

Giorgos Kaminis
Mayor
City of Athens, Greece

"Economic resilience remains a big challenge for us."

Khoo Teng Chye
Executive Director
Centre for Liveable Cities
Ministry of National
Development, Singapore

"Success depends on anticipating and acting accordingly."

Kamlesh Yagnik
Immediate Past President
Southern Gujarat Chamber
of Commerce and Industry

"Strong and compelling leadership is important."

Mike Gillooly
Chief Resilience Officer
City of Christchurch
New Zealand



CASE STUDY: CITIES IN ACTION

Athens, preventing the spread of chaos: Yorgos Kaminis won the seat of mayor of Athens in late-2010 as Greece was engulfed in an economic crisis. Due to the severity of its financial woes, the economic downturn manifested quickly into a socio-political crisis. Mr Kaminis operated in a difficult environment characterised by high unemployment and widespread civil unrest, as well as budget cuts that limited the government's ability to respond. That social cohesion was largely absent during the crisis highlights its importance during times of extreme economic stress.

Christchurch, bouncing back: One of New Zealand's largest cities, Christchurch, suffered devastating earthquakes in 2010-11. Mike Gillooly, the chief resilience officer for the city under the 100 Resilient Cities initiative, dealt closely with the aftermath of the devastation. He candidly shared that elements of corporate welfare were necessary to speed up private sector employees' return to work and that in hindsight, quicker and more deliberate action by public sector actors would have helped significantly.

Singapore, urgency from the get-go: Singapore is a young city-state that has undergone rapid change. Part of its success in moving from a third-world to a first-world country in a span of a few generations is the urgency in which it sees the issue of resilience. Khoo Teng Chye of the Ministry of National Development stated that the government sees it as an 'existential issue'. While much has been done to address problems such as water security, the government is now working to prevent its efforts from backsliding.

Surat, public-private partnerships: The city of Surat in the state of Gujarat in India gave the audience an example where tripartite cooperation between the government, the private sector and civil society helps to better foster resilience. The city's public-private partnership model, in particular, has been vital, according to Kamlesh Yagnik, the president of the South Gujarat Chamber of Commerce. Businesses have helped greatly in providing finance to overcome the resource gap governments in India have long struggled with.

KEYNOTE PANEL: THE RESILIENCE DIVIDEND

The notion of the 'resilience dividend' is hard to narrow down but it is nevertheless important to instigate and sustain resilience-building measures. In an ideal world, such efforts would not merely entail costs, with some return on resilience-building investments hopefully materialising down the line. The panellists each had their own view of this abstract notion, which fleshed out a few different manifestations of this dividend. There was unanimity, however, in the view that it is crucial to be able to identify returns to guarantee the participation of businesses in resilience strategies.

One perspective sees dividends in being able to bounce back quickly from unexpected shocks. Indeed, a successful resilience strategy is one which allows a city to get by without charity or aid. Aside from the damage-limitation aspect of developing resilient urban institutions, returns can also be defined by the positive spill-overs of these investments. These include the jobs they create and the

future gains from essential innovation. Altogether, the pursuit of resilience can, in and of itself, be a driver of economic growth. Building resilience is a process where there are multiple wins to be had from single investments, especially if a more defined framework for the purposes of measuring progress is established.

An appreciation of the fragility of the resilience dividend is imperative. The construction of a factory that can survive through earthquakes is of little use if the surrounding community cannot withstand seismic shocks. Flood-prevention barriers would be worthless if they only diverted waters from one part of the city to another. These hypotheticals underscore the importance of a holistic approach in reaping the resilience dividend. They show that the absence of comprehensive initiatives risk creating a divide between those who gain from resilience building and those who are left behind.

"You can get multiple wins from any investment and it comes through this resilience dividend."

Judith Rodin
President
The Rockefeller
Foundation

"The journey is to find a resilience framework to measure how we're doing."

Robert Care
Principal
Arup Group

"All the work of the Asian miracle could be wiped off."

Noeleen Heyzer
Under Secretary-General
United Nations





*"(on resilience)
How can companies
ensure they can
continue to do what
they want to do."*

Jessica Tan Soon Neo
Managing Director
Microsoft

*"A city is not going
to succeed until
and unless it can
create and re-create
the right quantity
of jobs."*

Manohar Khiatani
President and Group Chief
Executive Officer
Ascendas

*"Smart is doing
more with less."*

Gordon Falconer
Director, Smart Cities
Schneider Electric

*"It all comes down
to what employers
can do to manage
the risks their
employees face."*

Alexander Moschtaghi
Regional Director
Insurance Partnerships
International SOS

ON THE SOFA: TURNING THREATS INTO OPPORTUNITIES

Where there is a gap in the market, there is a role for businesses. Given the complexity of resilience and the comprehensive approach required in its pursuit, there are plenty of such gaps. Self-interest is another motivating force as business continuity is just as important as risks to the bottom line. Businesses can help by pooling and channelling funds and by providing the technical know-how and innovative goods and services required. Firms will, at times, have greater agility than governments to respond quickly to the needs of communities during periods of stress.

Companies such as Ascendas, a provider of solutions for commercial real estate, are in a unique position to bolster the structural integrity of many of Asia's industrial estates. Even though the concept of smart cities is still catching on, firms such as Schneider Electric will be

vital for powering the cities of tomorrow. Turning to micro-resilience, International SOS and its peers provide business travellers the security they need when venturing out to volatile parts of the world. The widespread use of its operating system in IT architecture has given Microsoft, a multinational software company, a strong platform to take the lead on building resilience against cybercrime.

While the representatives of these four companies largely made for an optimistic panel, a small hint of hesitance was palpable. Crucially, businesses need more governments to create an enabling environment for resilience-building measures to thrive. Resilience is a mind-set that needs to be shared by both the public and private sectors for such efforts to follow through. Overall, achieving collaboration without confrontation is critical for urban resilience.

INTERACTIVE SESSION: INNOVATIONS AND COLLABORATION FOR A MORE RESILIENT CITY

The (fictional) city of Utopia is in dire straits and it needs expert advice! Like many emerging cities, mystical Utopia is struggling under the pressures of massive migration and population growth.

The buzz in the conference room went up a notch as the audience was divided into five different groups, each representing pairs of seemingly-opposing stakeholders. Environmental groups, for example, were paired with property developers, while government policymakers were forced to work with future citizens. The role play tasked each group to come up with their first priority as resilience strategists for Utopia, identify other stakeholders they would need to work with to implement their strategy and a short sound bite of their initiative for the (similarly fictional) nightly news.

There was a good amount of overlap in a few of the

groups' priorities, which suggests that a common set of projects that all cities should work towards exists. These included more robust transport and power infrastructure to stem congestion and fight power outages. That said, there were also a few resilience-building strategies that made their debut in the conference during this session. In particular, the need to develop secondary cities for more decentralised opportunities for jobs to prevent cities like Utopia from being overcrowded in the first place was noteworthy.

At the end of the day, the lesson implicit in the interactive session was that building resilience will require stakeholders with opposing interests to work together. In the hyper-connected world of 24/7 news networks and social media where every interest group has an outlet to voice their concerns, urban resilience building necessitates the tacit consent of everyone.

"The gap in infrastructure financing remains huge, with US\$7trn needed in ASEAN alone."

Thongchie Shang
Associate Principal
McKinsey & Co

"If citizens do not want to live in resilient cities then all of these efforts are wasted."

Patricia Gallardo Dwyer
Global Head of
Sustainability
Shangri La Hotels





KEYNOTE INTERVIEW: RESILIENCE AND DEVELOPMENT – AN INTRINSIC RELATIONSHIP

“Everything we do has to be sustainable.”

Bindu Lohani
Vice-President
Knowledge Management
and Sustainable
Development
Asian Development Bank

International development banks play a key role in urban-resilience building, especially in countries where there is a dearth of government funds and private-sector investment. The Asian Development Bank (ADB) is one such institution. According to Bindu Lohani, a vice-president at the ADB, rising urbanisation is a major challenge in Asia as roughly three-quarters of the region will be living in cities at some point. The Bank very much acknowledges that employing a framework of resilience in the infrastructure projects it helps fund is an integral part of its day-to-day deliberations.

However, the environment the ADB operates in remains difficult. For a start, understanding what is happening at the local level is not easy. The complexity of the detail needed to assess the risks potential projects face makes the tasks of resilience planning and committing resources problematic. In

addition, in spite of the ADB’s donor base, finding additional sources of funds is still hard. Mr Lohani believes that money will come in if the Bank is able to find more investable projects, but this search for prospective developments alone is proving tough. What’s more, not a lot of attention is being paid to make existing infrastructure more resilient. “It is not just about the new projects”, said Mr Lohani.

Nevertheless, success in building more resilient cities is not impossible. Mayors in Asia do not have to look too far to find role models as there are a handful of successful cities in the region. The city-state of Singapore and Yokohama in Japan are examples. Looking ahead, what policymakers in these cities had—and what others should strive for, according to Mr Lohani—is a long-term plan, more public funds and a stick-to-itiveness to make their cities as liveable as possible.

KEYNOTE INTERVIEW: USING ECONOMIC POLICY TO DRIVE RESILIENCE

The Philippines is one of the most vulnerable countries in the world to natural disasters, with increasingly stronger typhoons wreaking havoc over the archipelago on a much-too frequent basis. These storms are a known risk yet, year after year, rebuilding efforts from the destruction caused by the previous year's typhoon are disrupted by the arrival of another cycle of devastating winds. Band-aid solutions in this context are largely futile. A stronger emphasis on resilience building, however, would go a long way.

The second-most populous but fifth-least developed country in South-east Asia was hit by an historic typhoon in November 2013. Typhoon Haiyan, or Yolanda as it is known locally, killed thousands of people, while injuring and displacing even more. The human tragedy, though, had a silver lining. As Cesar Purisima, the Philippines's secretary of finance, said in humble tones: Haiyan opened our eyes to the Philippines' fiscal vulnerabilities. As most of the victims

were uninsured, the government had to step in in a big way. With entire communities destroyed, local governments lost their resource base and therefore had to turn to the central government for funds to help relief efforts.

The change in mind-set post-Haiyan has been significant. The current administration now sees disaster management as integral to its path to fiscal stability, and proposals such as a climate resiliency fund and ways to better pool local government resources are being mooted. In the Philippines, however, there is uncertainty over policy continuity as the president's one-and-only term will soon end. Relocating whole communities away from disaster-prone areas will be difficult and convincing congress to cough up funds for resilience building has been a challenge, according to Mr Purisima. The sense of urgency is ever present: at the time of writing, another super typhoon is nearing landfall in the Philippines.

"Things you don't measure don't get done. So we need to learn how to measure resilience."

Cesar Purisima
Finance Secretary
Department of Finance
Philippines





"Resilience bridges the concepts of humanitarianism and development."

Ashvin Dayal
Associate Vice-President
and Managing Director, Asia
**The Rockefeller
Foundation**

"Resilience communication is a young and emerging field. It is important to get it right."

Michael Berkowitz
Chief Executive Officer
100 Resilient Cities

"Adopting resilience strategies makes people want to work for you."

Philippe Lacamp
Head of Sustainable
Development
Swire Pacific

KEY TAKEAWAYS: A RESILIENT FUTURE

The final session of the day recapped some of the broader issues related to urban-resilience building. While a lot of ground was covered in the conference, there were still a few questions that needed revisiting and more concrete answers, in particular how notions of resilience are defined and measured. The discussion largely centred on what one means when they talk about resilience and the efforts needed to develop it in cities.

Are we talking about climate change, encouraging economic diversity, social cohesion, or strengthening political institutions? How is resilience building different to concepts of sustainable living and environmental best practices? Should we be focusing more on prevention or response measures when we refer to resilience, or both? What is the difference between building resilience in cities compared with building resilience in whole countries?

The day's final question and answer session saw audience members voicing concerns over the fluid definition of resilience. Some argued that the complexity of resilience is one of its positive aspects, as it would encourage more comprehensive solutions to chronic urban stresses and unexpected shocks. Meanwhile, there was an opposing camp that viewed this complexity as a problem as it risks paralysis by analysis.

Closing the conference on a more positive note, however, one audience member described resilience simply as a journey, with cities reaping benefits after each and every small step. Whether urban-resilience building measures improve all areas of city-living all at once is irrelevant when thinking about the issue in this framework. Resilience, in this sense, is a process with no end game.