

# NTS BULLETIN

www.rsis.edu.sg/research/nts-centre

February 2018

CLIMATE CHANGE, ENVIRONMENTAL SECURITY AND NATURAL DISASTERS page 3

ENERGY SECURITY page 3

FOOD SECURITY page 4

HEALTH SECURITY page 5

PEACE, HUMAN SECURITY AND DEVELOPMENT page 5

TRANSNATIONAL CRIME page 6

HUMANITARIAN ASSISTANCE AND DISASTER RELIEF page 7

WATER SECURITY page 8

#### **Bridging the Development Gap Through Smart Cities in ASEAN**



Singapore's Electronic Road Pricing (ERP) system was one of its early initiatives which leveraged on information technology to manage road congestion.

Photo Credit: Courtesy of Flickr account of Tomoaki INABA and used under a creative commons license.

Resilience and innovation are the themes for Singapore's chairmanship of ASEAN this year, to achieve the twin goals of regional order amid emerging security challenges, and greater regional economic integration and connectivity.

An initiative proposed by Singapore, which has received support at the recent Foreign Ministers Retreat this month, is the development of an ASEAN Smart Cities Network (ASCN).

We argue that this has potential to contribute to the long-term goal of regional economic integration, bridging development gaps, especially if further cascaded to other cities in future, while avoiding pitfalls in the process of becoming smart cities.

## Unequal development as challenge to regional integration

Since 2003, an ASEAN Economic Community has been envisioned to be a single market and production base, within which goods, services and in-

vestments can move freely. Potential benefits include reduced production costs; specialization and greater efficiency among firms; and expanded markets for ASEAN firms, to further regional prosperity and competitiveness.

However, the path towards regional integration is not easy, as some countries may be too underdeveloped to participate and compete in the regional market economy. For instance, out of the 628 million people in ASEAN, between half and two-thirds are estimated to not have access to basic internet services. This prevents companies, especially micro, small and medium enterprises, from reaching markets in more developed countries in the region. Other challenges include natural disasters, traffic jams, and unstable supply of water and energy, which make it tougher to do business in these countries.

## Bridging the development gap through smart cities

ASEAN cities, where the urban population is expected to grow by more than 90 million people by 2030, are slowly becoming the centres for the region's development.

Yet, the challenges cities face today, such as environmental degradation, natural disasters, or sufficiency and stable supply of water, can worsen in the future if urban congestion is accompanied by impacts of climate change. These can make a city less ideal for doing business, and thus less competitive in the regional economy.

Singapore's proposal to develop an ASCN, whereby ASEAN countries commit to collaborate towards developing a 'smart and sustainable urban environment' in up to three cities per country, is timely.

A 'smart' city seeks to increase the use of information technology to achieve objectives it sets for itself, whether it be to help reduce production costs/increase productivity of firms, reduce the risk of losses

from natural disasters and health risks, address congestion, or even reduce energy bills. Examples of these smart city applications include improved flood control and disaster recovery through mobile communication services in Tainan, Taiwan, as well as Singapore's own Intelligent Transport System for detecting accidents and providing real time traffic information.

ASCN-designated cities thus have the potential of having better structural conditions, and in turn, becoming more competitive in the regional economy.

#### Leading the way

Having three new smart cities per ASEAN country is not enough. To be effective, cities involved in this initiative should be the starting point for further transformation across other cities in the ASEAN member countries. These first cities should serve as guideposts for other cities within each country to follow.

Before that, though, it will be important to ensure that the smart technologies to be employed do not themselves become the causes for disruption or lack of resilience. The challenge in fully automating and networking functions like energy or traffic management, is that this makes the city vulnerable to hacking and cyberattacks. For instance, Ukraine's grid was downed for several hours, while Haifa's (Israel) toll-road disruption lasted eight hours. Similarly, as some argue, it will be important to ensure that cities be as energy efficient as possible in smartingup, to ensure that they do not end up contributing more to climate change, in the process.

Singapore can lead this digital revolution among ASEAN cities, having had its own Smart Nation initiative since 2014. As ASEAN chair, it can also help facilitate support for other countries, cities and institutions that make up the collaborative ASCN effort, towards addressing the potential pitfalls raised.

#### **Suggested Readings**

- The Economist, "Economic integration and the 'four freedoms'," 8 December 2016.
- Green Peace International, "How dirty is your data? A look at the energy choices that power cloud computing," 2011.
- Groupe Speciale Mobile Association (GSMA), "Maximising the smart cities opportunity: Recommendations to Asia-Pacific policymakers," 2017.
- Jonathan Woetzel et al., "Southeast Asia at the crossroads: Three paths to prosperity, McKinsey Global Institute," 2014.
- Kyodo News, "Singapore proposes 'Asean Smart Cities Network'," Bangkok Post, 5 February 2018.
- Ministry of Foreign Affairs, Singapore, "Press statement by the chairman of the ASEAN Foreign Ministers' retreat Singapore," 6 February 2018.
- Phidel Vineles, "ASEAN digital economy: A new pillar?" RSIS Commentary 020/2018, 9 February 2018.
- Rob Kitchin and Martin Dodge, 2017, "The (in)security of smart cities: Vulnerabilities, risks, mitigation and prevention," *Journal of Urban Technology*, 2017.

#### **CLIMATE CHANGE, ENVIRONMENTAL SECURITY AND NATURAL DISASTERS**

#### **NEWS & COMMENTARIES**

Earth sweltered again in 2017: Hottest year without an El Nino

Alister Doyle, Reuters

18 January 2018

Only 6 per cent of ewaste in Singapore recycled, says NEA study

Samantha Boh, The Straits Times 19 January 2018

Singapore looking at laws for producers to take back e-waste from customers

Siau Ming En, Today 19 January 2018 Climate change threatens half of U.S. military sites: Pentagon Sebastien Malo,

1 February 2018

Reuters

No children because of climate change? Some people are considering it

Maggie Astor, The New York Times 5 February 2018

Satellite observations show sea levels rising, and climate change is accelerating it

Brandon Miller, CNN

12 February 2018

#### SELECTED PUBLICATIONS

Long-term increases in tropical flowering activity across growth forms in response to rising CO2 and climate change

Stephanie Pau, Daniel K. Okamoto, Osvaldo Calderón, and S. Joseph Wright, Global Change Biology 2017

Marine environmental protection in the South China Sea: Challenges and prospects part 2
Julius Cesar Trajano, Lina Gong, Margareth Sembiring and Rini Astuti,
NTS Insight No. IN18-01,
Singapore: RSIS' Centre for Non-Traditional Security

#### **EVENTS & ANNOUNCEMENTS**

Studies

2018

Nexus 2018: Water, Food, Energy and Climate

16–18 April 2018 Chapel Hill, the USA Africa Climate Smart Agriculture Summit 15–16 May 2018 Nairobi, Kenya



Courtesy of Flickr account of European Commission DG ECHO and used under a creative commons license.

#### **ENERGY SECURITY**

#### **NEWS AND COMMENTARIES**

Asia's energy security future: The geopolitical dimension

Niharika Tagotra, The Diplomat 1 February 2018

Vietnam sees solar power construction boom as nation goes green

Atsushi Tomiyama, Nikkei Asian Review 5 February 2018

Turning homes into a power plant

Agence France-Presse, The Straits Times 5 February 2018 Timor-Leste's oil: Blessing or curse?

Vijayalakshmi Menon, RSIS Commentary 15 February 2018

PH aggressively pursuing joint oil and gas exploration with China

Claire Jhiao, CNN Philippines 15 February 2018

Singapore Budget 2018: Singapore's carbon tax to start at S\$5 a tonne

Andrea Soh, The Business Times 20 February 2018



Courtesy of Wikimedia account of Gretchen Mahan and used under a creative commons license.

#### **EVENTS AND ANNOUNCEMENTS**

#### Renewable Energy Week

19-22 March 2018 Singapore

### SIEW 2018 Global Launch

27 March 2018 Singapore

#### **SELECTED PUBLICATIONS**

#### Nuclear safety and security culture: Powering nuclear governance in East Asia

RSIS' Centre for Non-Traditional Security Studies, Singapore: RSIS' Centre for Non-Traditional Security Studies 2018

#### Towards a low carbon Asia: The challenges of ensuring efficient and sustainable energy

Elena Reshetova and Rajeev Ranjan Chaturvedy, ISAS Special Report No. 49, Singapore: Institute of South Asian Studies 2018

#### **FOOD SECURITY**



Courtesy of Flickr account of olly301 and used under a creative commons license.

#### SELECTED PUBLICATIONS

Reducing vulnerability among smallholder farmers through indexbased flood insurance in India: Equity matters Panchali Saikia, Giriraj Amarnath, and Floriane Clement, WLE Briefing Series No. 19, Colombo: CGIAR Research Program on Water, Land and Ecosystems, International Water Management Institute (IWMI) 2017 Scaling up commercial urban agriculture to meet food demand in Singapore Jose Ma. Luis Montesclaros, Stella Liu and Paul P.S. Teng, NTS Report No.7, Singapore: RSIS' Centre for Non-Traditional Security Studies 2018

#### **NEWS & COMMENTARIES**

# The WTO, agriculture, and development: A lost cause?

Kimberly Ann Elliott, International Centre for Trade and Sustainable Development 15 February 2018

## China stands firm on grain production target

Liangyu, Xinhua News 16 February 2018

# Triple helix approach seen as key to solving world's food crisis

Keith J. Fernandez, Gulf News 18 February 2018

## Reinventing crop insurance in PHL

Jovee Marie de la Cruz, Business Mirror 18 February 2018

# WFP completes first food delivery by boat in Upper Nile

Janat Adongo, United Nations Mission in Sudan 18 February 2018

## NFA plan to stop sale of cheaper rice hit

Karl R. Ocampo, Philippine Daily Inquirer 19 February 2018

#### **EVENTS & ANNOUNCEMENTS**

11<sup>th</sup> World Congress on Plant Biotechnology & Agriculture 5-7 March 2018 Paris, France Global Food Security Symposium 2018 21-22 May 2018 Washington D.C.



Courtesy of Flickr account of World Fish and used under a creative commons license

#### **HEALTH SECURITY**



Courtesy of Flickr account of CDC Global and used under a creative commons license.

#### **NEWS & COMMENTARIES**

US facing worst flu outbreak in a decade Kristen Saloomey,

Al Jazeera 3 February 2018

UN renews push to abolish female genital mutilation

Lisa Schlein. Voice of America 6 February 2018

**UN releases \$9.1 million** to fill 'critical healthcare gaps' in Yemen

World Health Organisation, Reliefweb 6 February 2018

Rohingya refugees on frontline of fight to contain diphtheria

Caroline Gluck. Reliefweb 7 February 2018

Cholera in a time of neoliberalism

Jonathan Kennedy, Reuters

7 February 2018

Somaliland issues fatwa banning female genital mutilation

Nita Bhalla. Reuters 8 February 2018

The trauma trap: what's causing inequalities in emergency care?

David Cox. The Guardian 8 February 2018

#### **SELECTED PUBLICATIONS**

Communicating risk in public health emergen-

World Health Organisation, Geneva: World Health Organisation 2018

**Mental health status** of adolescents in South-East Asia: Evidence for action

World Health Organisation (WHO), New Delhi: World Health Organisation 2017

#### **EVENTS & ANNOUNCEMENTS**

**2nd Annual Digital Healthcare Summit** 2018

8-11 May 2018 Singapore

4th International Global on Public Health Conference 2018

13-15 June 2018 Colombo, Sri Lanka



Courtesy of Flickr account of ADB and used under a creative commons

#### PEACE, HUMAN SECURITY AND DEVELOPMENT

#### **NEWS AND COMMENTARIES**

**Kosovo: Speculation** rife after Serb politician Oliver Ivanovic's murder

Nemanja Rojevic, Deutche Welle 17 January 2018

Yemen separatists surround presidential palace in Aden

Patrick Wintour. The Guardian 30 January 2018

**Opportunity for North** Korea nuclear talks exists but challenges remain, says analyst Goh Sui Noi.

The Straits Times 7 February 2018



Courtesy of Flickr account of US Army Africa and used under a creative commons license.

## Massacre in Myanmar: A Reuters special report

Wa Lone, Kyaw Soe Oo, Simon Lewis, and Antoni Slodkowski, Reuters

8 February 2018

Friend or foe? Assad quietly aids Syrian Kurds against Turkey

Reuters staff, Reuters 11 February 2018 Washington no more: Palestine tunes to Moscow for future Israel talks

John Wight, Russia Today 14 February 2018

In Colombia, two rebel groups take different paths

Nicholas Casey and Joe Parkin Daniels, The New York Times 14 February 2018

#### **SELECTED PUBLICATIONS**

### A Venezuelan refugee crisis

Shannon K. O'Neill, Contingency Planning Memorandum No. 33, Council on Foreign Relations 2018 Prices, products and priorities: Meeting refugees' energy needs in Burkina Faso and Kenya

Drew Corbyn and Mattia Vianello, Chatham House Report 2018

#### **EVENTS & ANNOUNCEMENTS**

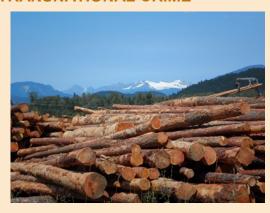
International Conference on Human Security Studies 2018
24-25 May 2018

Montreal, Canada

2-3 November
Belgrade City, Serbia

#### al Confer- International Conferuman Securi- ence for Human Securi-

#### TRANSNATIONAL CRIME



Courtesy of Flickr account of Mari Smith and used under a creative commons license.

How Greenpeace used minecraft to stop illegal logging in Europe's last lowland primeval forest Angela Natividad, ADWEEK

22 January 2018

Singapore leads Asean in its cyber security policies, but the region needs to work together: Report

Aqilah Allaudeen, Business Insider Singapore 23 January 2018 China is decimating Southeast Asian wildlife Gregory McCann,

The Diplomat 24 January 2018

#### **NEWS & COMMENTARIES**

Vietnam's corruption crackdown is targeting the powerful. Has it gone too far?

Jessica Meyers, Los Angeles Times 16 January 2018

Fighting human trafficking, together
David Abramowitz,
The Hill
18 January 2018

What does Myanmar's 'biggest ever' drug bust actually mean?
Prashanth Parameswaran, The Diplomat

19 January 2018

Facebook dominates as the main market place for illegal live reptile trade in the Philippines TRAFFIC 19 January 2018

To counter wildlife trafficking, local enforcement, not en-route interdiction, is key Vanda Felbab-Brown, Mongabay 19 January 2018

#### **SELECTED PUBLICATIONS**

Fourth evaluation
round: Corruption prevention in respect of
members of parliament,
judges and prosecutors
Group of States against Corruption Secretariat Council of
Europe,
Compliance Report,
Strabourg: Group of States
against Corruption Secretariat Council of Europe

Methodology – world drug report United Nations Office on

Drugs and Crime, Vienna: United Nations Office on Drugs and Crime 2017

#### **EVENTS & ANNOUNCEMENTS**

21st Annual IBA Transnational Crime Conference

16-18 May 2018 Krakow, Poland Conference on Crimes Against Women 16-19 April 2018 Texas, USA

#### **HUMANITARIAN ASSISTANCE AND DISASTER RELIEF**



Courtesy of Flickr account the U.S. Army and used under a creative commons license.

#### **SELECTED PUBLICATIONS**

An assessment on community justice system in the four undocumented Myanmar nationals settlements in Cox's Bazar International Organization for Migration, Final Report 2017

ASEAN disaster law mapping - Implementing AADMER: A regional stocktake Mary Picard and Victoria Bannon, Geneva: International Federation of Red Cross and Red

Crescent Societies

2017

#### **NEWS & COMMENTARIES**

UNFPA dignity kits reach pregnant women and new mothers displaced by Mayon Volcano eruption United Nations Population

United Nations Population Fund

26 January 2018

Society-driven disaster response: New model from China? Lin Peng & Fengshi Wu, RSIS Commentary 30 January 2018

Grab and IFRC call for solidarity with people in need through Southeast Asia's largest loyalty programme International Federation of

Red Cross and Red Crescent Societies
6 February 2018

Hualien earthquake: Technology key to identifying those trapped Taipei Times 10 February 2018

From principle to practice: Humanitarian innovation and experimentation

Sean Martin McDonald, Kristin Sandvik & Katja Jacobsen, Peace Research Institute Oslo

12 February 2018

Besieged Rohingya face 'crisis within the crisis': deadly floods Michael Schwirtz, The New York Times 13 February 2018

#### **EVENTS & ANNOUNCEMENTS**

Global Expert Consultation on the Zero Draft of the Global Capacity Development Strategy in support of the implementation of the Sendai Framework for Disaster Risk Reduction
14-15 March 2018

Geneva, Switzerland

Humanitarianism and the Remaking of International Law 31 May-2 June 2018 Melbourne, Australia

#### **WATER SECURITY**

#### **NEWS AND COMMENTARIES**

Water-supply security plan for Manila revealed Business Mirror 25 January 2018

Small but smart: Benin and Togo cooperate to ensure water security The World Bank, Modern Diplomacy 26 January 2018

A matter of survival: Learning to cooperate over water Ellie Anderson, New Security Beat 1 February 2018 Enhancing water security in urban areas
Benedito Braga,
Euractive
7 February 2018

Tackling cholera, water security challenges Mark Richardson, Zambia Daily Mail 12 February 2018

Agriculture scientist urges TN to set up water security board M T Sajul, The Times of India 18 February 2018



Courtesy of Flickr account of Abdul Rahman and used under a creative commons license.

#### **SELECTED PUBLICATIONS**

Research report: How climate change affects food and water security in Indonesia Ida Dreierstad, Dalkeith: Future Directions International 2018

A matter of survival: Report of the Global High-Level Panel on Water and Peace Global High-Level Panel on Water and Peace, Geneva: Global High-Level Panel on Water and Peace 2017



Courtesy of Flickr account of Philippe Floch and used under a creative commons license

#### **EVENTS & ANNOUNCEMENTS**

Singapore World Water Day 1-31 March 2018 Singapore 8<sup>th</sup> World Water Forum 18-23 March 2018 Brasilia, Brazil