

NTS BULLETIN

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Regional training courses on nuclear security are being offered by Japan to Asian countries and ASEAN Member-States.

Photo Credit: IAEA via flickr

Since 2013, the RSIS' Centre for Non-Traditional Security Studies has been organising policy roundtables on post-Fukushima nuclear energy governance in East Asia, as part of the annual Singapore International Energy Week The previous RSIS SIEW (SIEW). roundtables have highlighted that the biggest risk associated with nuclear power comes not from the nuclear technology itself but the lack of a safety-security culture - the mindsets, attitudes, and behaviours of those involved in the operation and regulation of nuclear facilities and utilisation of radioactive materials. In this regard, the RSIS' SIEW roundtable on October 27, 2017 focuses on developing nuclear safety-security culture in East Asia.

An important lesson from the Fukushima accident is the need to have broader perspectives on (and preparedness for) 'unthinkable' events and unforeseen circumstances – basically avoiding complacency. Human errors such as complacency and lack of critical thinking have been identified as key contributors to the Fukushima nuclear disaster. Yet, post-Fukushima resolutions in the nuclear industry have focused only on technological improvements, leaving out nuclear safety cul-

ture and security culture, which still need to be deepened in East Asia, including in ASEAN.

Human Errors Compromising Safety-Security Culture

In both China and Japan, a lack of a safety-security culture has served as an obstacle to strengthening safety and security in nuclear facilities.

In October 2016, China's National Nuclear Safety Administration made public 16 safety failures that occurred in China's nuclear plants during the year, all involving breaches of operational guidelines and mistakes made by power plant staff members.

Meanwhile, the crucial critical mindset of the regulatory staff was still found to be lacking in Japan's Nuclear Regulation Agency (NRA), according to the International Atomic Energy Agency's (IAEA) 2016 Integrated Regulatory Review Service (IRRS) Report. The IAEA recommends that the training for inspectors should take a holistic approach and include the development of critical thinking.

Deepening Regional Cooperation on Safety-Security Culture

Notwithstanding these challenges, a few steps have already been taken by China and Japan to support ASEAN in building capabilities on nuclear energy and promoting their technology.

China has embarked on rapid nuclear power development with 37 nuclear power reactors in operation, with 20 under construction. With more about to start construction, China has also been promoting its nuclear technology overseas, including in Southeast Asia. For instance, China General Nuclear Power Corp (CGN) has already set up business offices in Southeast Asia. Since 2015, CGN has been co-organising, together with ASEAN Centre for Energy, ASEAN-China Capacity-Building on Nuclear Energy Workshop.

Like China, Japan has also been promoting its nuclear reactor technology. Japan's centres of excellence such as Japan Atomic Energy Agency and Japan Atomic Energy Commission have been providing technical training assistance to ASEAN Member-States in enhancing nuclear regulation, safety, security and emergency preparedness.

To make the ASEAN's capacity-building cooperation with China and Japan more comprehensive, it is important to complement technical training on nuclear energy with human resource development, especially in developing a nuclear safety-security culture. While there are no nuclear power plants yet in Southeast Asia, radioactive materials are already being widely used in industrial factories, research reactors, universities and hospitals in the region.

It is therefore crucial to develop a safety-security culture in the joint activities, technical workshops, and meetings of the ASEAN Network of Regulatory Bodies on Atomic Energy (ASEANTOM) and the ASEAN Nuclear Energy Cooperation-Subsector Network (NECSSN). With the transboundary risks of nuclear accidents or the possibility of hijacking radioactive materials ever present, it is glaringly urgent that ASEAN Member-

States apply the lessons from Northeast Asia by collectively building the necessary skills and mindsets that will discourage complacency and promote critical thinking in using nuclear energy.



IAEA Director General Yukiya Amano visited the Livestocks Breeding and Veterinary Department in Yangon, Myanmar in June 2017. Radioactive materials and radiation apparatus are used in livestock breeding.

Photo Credit: Shiota Kamishima / IAEA via flickr

Suggested Readings:

- Mely Caballero-Anthony and Julius Cesar Trajano, 2017, "Enhancing nuclear energy cooperation in ASEAN: Regional norms and challenges." Chapter 7 in *Learning from Fukushima: Nuclear power in East Asia*, Peter Van Ness, Mel Gurtov, eds. Canberra: Australia National University Press.
- IAEA, 2016, Report of the Integrated Regulatory Review Service Mission to Japan, Tokyo Japan, 10-22 January.
- Zhang, Hui, 2016, "China's nuclear security: Progress, challenges, and next steps", Project on Managing the Atom, Belfer Center for Science and International Affairs, Harvard Kennedy School.
- IAEA, 2008, Nuclear security culture: Implementing guide. Vienna: International Atomic Energy Agency, 2008.

CLIMATE CHANGE, ENVIRONMENTAL SECURITY AND NATURAL DISASTERS

NEWS & COMMENTARIES

Pope, Orthodox leader make climate change appeal to 'heal wounded creation'

Isla Binnie, Hugh Lawson, Reuters

1 September 2017

Climate change to cause humid heatwaves that will kill even healthy people

World Health Organization 15 September 2017

Islamic State and climate change seen as world's greatest threats, poll says

Joanna Walters. The Guardian 17 September 2017

U.S. governors at U.N. Assembly: 'You have allies' on climate change

Lisa Friedman and Brad Plumer. The New York Times

18 September 2017

Article on climate change 'inaccurate'

Henry Fountain.

The Straits Times. The New York Times

18 September 2017

US to join climate talks despite planned withdrawal from Paris accord

BBC News.

19 September 2017

Official: Dam. other designs must consider climate change David Warren,

Associated Press 22 September 2017



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

SELECTED PUBLICATIONS

Climate science special report: A sustained assessment activity of the U.S. global change research program

D.J. Wuebbles, et al. (eds), U.S. Global Change Research Program 2017

Who drives climaterelevant policies in the rising powers? Hubert Schmitz.

New Political Economy, Vol. 22, No. 5, pp. 521-540 2017

EVENTS & ANNOUNCEMENTS

Global Workshop on Climate Change Adapta-

11-12 December 2017 Geneva, Switzerland

World Symposium on Climate Change and Biodiversity

3-5 April 2018 Manchester, the UK

ENERGY SECURITY

NEWS AND COMMENTARIES

Malaysia inks crossborder power deal with **Thailand and Laos**

The Malaysian Insight 27 September 2017

Siting solar energy farms at reservoirs

Fabian Koh, The Straits Times 30 September 2017

ASEAN charts new goals for region's energy collaboration

Myrna Velasco. Manila Bulletin 2 October 2017

PH advancing planned **LNG** investments

Mvrna Velasco.

Manila Bulletin 2 October 2017

Fukushima operator gets first safety approval since 2011 tsunami disaster

AFP.

The Straits Times 4 October 2017

IAEA releases projections on global nuclear power capacity through 2050

Shant Krikorian and Avhan Evrensel.

International Atomic Energy Agency

4 October 2017



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EVENTS AND ANNOUNCEMENTS

Asia Clean Energy Summit

24-26 October 2017 Singapore Nuclear Safety and Security Culture: Powering Nuclear Governance in East Asia— RSIS Roundtable at Singapore International Energy Week 2017

27 October 2017 Singapore

SELECTED PUBLICATIONS

Learning from Fukushima: Nuclear power in East Asia

Peter Van Ness and Mel Gurtov Australian National University Press 2017 The 5th ASEAN energy outlook: 2015-2040 ASEAN Centre for Energy

FOOD SECURITY



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

SELECTED PUBLICATIONS

The state of food security and nutrition in the world FAO, IFAD, UNICEF, WFP and WHO 2017

Synopsis: Global food policy report 2017 International Food Policy Research IFPRI (IFPRI) 2017

NEWS & COMMENTARIES

Mexico mulls pork as response to U.S. NAFTA produce proposal: sources David A. Garcia, Reuters

15 September 2017

Africa second in UN world hunger ranking Nyaboga Kiage and Aggrey Omboki, Daily Nation 18 September 2017

Iraqi Kurds must give up on independence or go hungry - Erdogan BBC News 26 September 2017 Turkey forces hungerstrike academic into intensive care, says family AFP, Middle East Eye 26 September 2017

Rice and the private sector: Asia's foodenergy-water nexus Stella Liu, RSIS Commentary 27 September 2017

Draft UN report calls out Saudi Arabia for Yemeni children deaths Rhys Dubin, Foreign Policy 4 October 2017

EVENTS & ANNOUNCEMENTS

2017 International Conference on Agricultural and Food Science
25-27 October 2017
Lahore, Pakistan

3rd International Conference on Global Food Security 3-6 December 2017 Cape Town, South Africa Seventh International Conference on Food Studies 26-27 October 2017 Rome, Italy

HEALTH SECURITY



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NEWS & COMMENTARIES

Why global health is center stage at the United Nations General Assembly

Alexandra Sifferlin, Time 18 September 2017

Too few antibiotics in pipeline to tackle global drug-resistance crisis, WHO warns

Sarah Boseley, The Guardian 19 September 2017

When will the economy start caring about home-care work?

Annie Lowrey
The Atlantic
22 September 2017

WHO warns of cholera threat in Bangladesh Rohingya camps AFP.

The Straits Times 25 September 2017

Hospitals in crisis in Uganda as Middle Eastern countries poach medical staff

Samuel Okiror, The Guardian 25 September 2017

27 September 2017

Report finds nearly half of all abortions worldwide are unsafe Ashley Welch, CBS News Is health care a right?

Atul Gawande,

The New Yorker

2 October 2017

Why gun violence is a public health crisis
Leon Kan,
MIMS Today
9 October 2017

SELECTED PUBLICATIONS

Antibacterial agents in clinical development:
An analysis of the antibacterial clinical development pipeline, including tuberculosis
World Health Organisation
2017

Water, sanitation and hygiene: the unfinished agenda in the World Health Organisation South-East Asia Region

Indira Chakravarty et al., WHO South-East Asia Journal of Public Health, Vol 6, No. 2:22-26 2017

EVENTS & ANNOUNCEMENTS

26th International Conference on Healthcare & Life-Science Research

23-24 December 2017 Dubai, UAE The International Conference of Public Health and Preventative Medicine 2018

5-7 January 2018 Bangkok, Thailand



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PEACE, HUMAN SECURITY AND DEVELOPMENT

NEWS AND COMMENTARIES

Cambodia's crumbling democracy

George Wright,
The Diplomat
16 September 2017

Is the Philippines violent drug war spreading to Indonesia

Nithin Coca, The Diplomat 6 October 2017 How the Rohingya crisis is changing Bangladesh

Tom Felix Joehnk, The New York Times 6 October 2017

Spain and Catalonia are heading towards an uncertain and dangerous future

Emilio Ferrer, Sydney Morning Herald 8 October 2017



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

The story not being talked about in Myanmar

Anbarasan Ethirajan, BBC News 9 October 2017

Rohingya Crisis: Breaking the unending cycle of exodus

Janet Lim, RSIS Commentaries 9 October 2017

Ethiopia's ethnic federalism is being tested

The Economist, Nazret 9 October 2017 A split within a split: the Catalan valley sticking with Spain

Angus Berwick, Reuters 9 October 2017

Will our Nobel peace prize winner convince Australia to give up nuclear weapons?

Tim Wright, The Guardian 9 October 2017

SELECTED PUBLICATIONS

Smart peacekeeping: Toward tech-enabled UN operations

A. Walter Dorn, International Peace Institute 2017 Humanitarianism in the Age of Cyberwarfare UN OCHA 2017

EVENTS & ANNOUNCEMENTS

International Conference on Human Rights and Human Security 2018

25-26 June 2018 Paris, France 10th IEEE International Conference on Cyber Conflict

29 May - 1 June 2018 Tallinn, Estonia

TRANSNATIONAL CRIME



Courtesy of Flickr account of The Daily Star News and used under a creative commons license.

The UN wants Facebook to fix its human trafficking problem

Zoe Schalnger, Quartz

28 September 2017

Myanmar soldiers nabbed with 2 million pills in Rakhine, as drug trade defies crisis AFP.

The Straits Times

Bangladesh destroys boats ferrying Rohingya from Myanmar

Tom Allard and Damir Sagolj, Reuters

5 October 2017

NEWS & COMMENTARIES

ASEAN ministers discuss measures to address transnational crimes

UNTV, Yahoo News

20 September 2017

China: Beijing decides how to regulate Its Anti-Corruption Body

Stratfor

26 September 2017

Fear of Rohingya's ending-up as human trafficking victims

B. Suresh Ram, The New Straits Times 28 September 2017

Barristers object to nomination of controversial Brazil anticorruption squad for UBC prize

Carlito Pablo, The Georgia Straight 28 September 2017

SELECTED PUBLICATIONS

Corruption risks: Mining approvals in Australia

Transparance International

Transparency International Australia

October 2017

Case Digest - Evidential issues in trafficking in persons cases

United Nations Office on Drugs and Crime October 2017

EVENTS & ANNOUNCEMENTS

Latin American Anti-Corruption Enforcement and Compliance

6–7 November 2017 Hilton São Paulo Morumbi, São Paulo, Brazil 8th Biennial Global Immigration Conference
15–17 November 2017
The Grange St Pauls,
London, England

HUMANITARIAN ASSISTANCE AND DISASTER RELIEF



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

SELECTED PUBLICATIONS

Disaster response regional architectures:
Assessing future possibilities
Alistair Cook, Jessica Ear, and Deon Canyon,
RSIS Policy Brief
2017

Asia-Pacific disaster report 2017 UNESCAP 2017

NEWS & COMMENTARIES

Martial law and trust: Humanitarian challenges in Marawi Martin Searle, RSIS Commentary 21 September 2017

Dubai hopes to harness tech advances to help children access education Caline Malek.

The National 24 September 2017

2 October 2017

A Mapathon to pinpoint areas hardest hit in Puerto Rico Alice Yin, The New York Times Trapped Rohingya Muslims in Myanmar get first substantial food aid in months
Wa Lone,
Reuters,
11 October 2017

There's a massive humanitarian crisis in Bangladesh's Rohingya refugee camps
Nayma Qayum,
The Washington Post
12 October 2017

Improving disaster response: Role of knowledge sharing Christopher Chen, RSIS Commentary 13 October 2017

EVENTS & ANNOUNCEMENTS

The Eighth Annual National Roundtable on Disaster Risk Reduction - "Building Back Better" 23-24 October 2017 Halifax, Canada

Disaster Risk Reduction, Response and Sustainable Reconstruction: Capacity Building for Equitable Planning and Development
8 November 2017
Boston, USA

WATER SECURITY

NEWS AND COMMENTARIES

Adaptation efforts in Asia shine spotlight on water resources, agriculture

Elena Kosolapova, International Institute for Sustainable Development (IISD)

21 September 2017

What innovation looks like when water is a strategic resource Will Sarni, GreenBiz 27 September 2017

Only one of four river basins in India can support vegetation during a drought year: Study
Snehal Fernandes,
Hindustan Times
2 October 2017

OECD publication explores impacts and trade-offs from land-energy-water nexus Wangu Mwangi, IISD

3 October 2017

Floods bring alluvium to fields in Mekong Delta Mai Chi, Vietnam.net Bridge 5 October 2017

China's fight against deserts could hurt its water security Kai Schwarzel and The Conversation, Asia Times 16 October 2017



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

SELECTED PUBLICATIONS

Addressing water security in the People's Republic of China: The 13th five-year plan (2016 -2020) and beyond ADB 2016

The land-water-energy nexus: Biophysical and economic consequences OECD 2017



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

EVENTS & ANNOUNCEMENTS

World Toilet Summit 2017 20-21 November 2017 Melbourne, Australia Call for Papers: 1st International Conference on Water Security
15 December 2017
Toronto, Canada