

NTS Bulletin September 2014

This year is the 20th anniversary of the release of the 1994 United Nations Development Programme's (UNDP) Human Development Report, which defined the concept of human security and brought the seven human security components to international attention. It is thus timely to ask: what are now the new challenges to human security? The following is the first part of a series exploring new and complex issues which have gone beyond the seven original components of human security.

New Issues in Human Security: Energy-Climate-Water-Food Nexus

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Today, millions of people experience insecurity as a result of new and complex issues threatening human welfare and dignity, such as climate change and the contested or inefficient use of energy and water, which are all beyond the original seven human security components *including* economic, food, health, environmental, personal, community and political security that were introduced in the 1994 UNDP Human Development Report.

Energy-climate change-water-food nexus

Energy and climate change significantly impact water and food security. From a human security perspective, sourcing energy supplies from fossil fuels (coal, oil and natural gas) and shale gas has been inextricably connected to air pollution, water stress, and global climate change which is linked to extreme weather phenomena that have already killed or affected millions of people around the world.

Climate change, a consequence of fossil energy-related carbon emissions, remains a challenge to water and food security as well. It endangers mountain glaciers, which serve as the world's biggest freshwater banks, feeding rivers and supplying water to two billion people in Asia alone. It causes agricultural drought and undermines water supplies from reservoirs and rivers that are used to irrigate farmlands. Worsening water scarcity could trigger significant annual grain losses affecting world food production and consumption. Severe weather phenomena, such as storms, could destroy food transport and distribution infrastructure resulting in the disruption of food supply chains and affecting food access and availability.

Reducing overreliance on high-carbon energy sources is central to climate change mitigation strategies. Yet energy remains crucial in ensuring water and food security. Production and distribution of modern freshwater systems for agricultural purposes requires a substantial amount of energy. High efficiency irrigation systems may save water but may also lead to higher energy demand. Moreover, while intensive water irrigation boosts food production, it can also undermine river flows and reduce water supply for hydropower dams. Rising energy prices could also affect food production, trigger food price volatility, and compromise availability and access to food. One instance of this was the rapid energy price hike in 2006/2007 which partly caused a food price crisis in 2007/2008. It was the oil price hikes which heightened the costs of food production (e.g., fertilizers and other crop production facilities) and the food supply chain (transports and packaging) which both require petroleum or natural gas to sustain production and consumption. Indeed, this illustrates the complex interplay of the rising demand for energy and the impacts of climate change on water and food security.

Broadening and deepening human security paradigm

While the international community recognises the interconnectedness of energy, climate change, water and food, these challenges currently remain addressed in isolation. The human security paradigm facilitates a comprehensive approach through enhanced dialogue, collaboration and coordination amongst the non-state, national and multilateral actors, ensuring that co-benefits and trade-offs are contemplated and that pertinent safeguards are institutionalised. In the context of the post-2015 development agenda and in light of relevant initiatives to set a unified development agenda via sustainable development goals, it is hoped that the broad and deep application of the human security approach can help galvanise non-state, national and multilateral efforts to effectively address emerging human security issues.

Core Readings:

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CLIMATE CHANGE, ENVIRONMENTAL SECURITY AND NATURAL DISASTERS

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Events & Announcements

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- Adrian H. Gallardo, Tomose Matsuzaki, Hisashi Aoki, 2014, Geological storage of nuclear wastes: Insights following the Fukushima crisis, Energy Policy, Vol. 73, pp. 391 – 400.

Events & Announcements

- 12th Annual FLNG Asia Pacific Summit, 21 – 23 October 2014, Seoul, South Korea.
- Singapore International Energy Week (SIEW) 2014, 27 – 31 October 2014, Singapore.

FOOD SECURITY

News & Commentaries

- Cecilia Tortajada, 'Land grabbing' myth and China-bashing, Shanghai Daily, 4 August 2014.
- Rebecca Bundhun, Spoilt produce blights Indian food chain, The National, 23 August 2014.
- Dennis D. Gray, Thailand's six-legged edible livestock a boon to farmers, The Seattle Times, 25 August 2014.
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- Editorial comment: Food self-sufficiency boon for economy, The Herald, 27 August 2014.
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Events & Announcements

- Committee on World Food Security 41, 13 – 18 October 2014, Rome, Italy.
- 7th McGill Conference on Global Food Security, 28 – 29 October 2014, Quebec, Canada.

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Events & Announcements

- Sixty-fifth Session of the WHO Regional Committee for the Western Pacific, 13 – 17 October 2014, Philippines.
- Call for Abstracts: Co-infection: A Global Challenge for Disease Control, 15 – 20 March 2015, Abstract deadline: 16 December 2014.

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- Dubravka Šimonović, 2014, Global and regional standards on violence against women: The evolution and synergy of the CEDAW and Istanbul Convention, Human Rights Quarterly, Vol. 36, No. 3, pp. 590 – 606.

Events & Announcements

- Southeast Asia – Africa Dialogue on Norm Promotion and Capacity Building in Human Rights, Mass Atrocities prevention and Civilian Protection, 29 – 30 October 2014, Bangkok, Thailand.
- East-West Center Graduate Degree Fellowship, deadline 3 November 2014, Honolulu, Hawaii.

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Events & Announcements

- International Conference on Transnational Organized Crime and Terrorism, 5 – 10 April 2015, Boston, United States.
- ICLPJ 2015: XII International Conference on Law, Policing and Justice, 28 – 29 June 2015, London, United Kingdom.

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Events & Announcements

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- Workshop: "Comparing Water Governance in China & India: Challenges & Policy Options", 24 – 25 October 2014, Singapore.