



# WATER CRISIS ALERT: CHINA'S EXISTING SECURITY THREAT

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The intensification of China's trade war with the United States, the uncertainties in the South China Sea and the North Korean nuclear crisis dominated the news headlines in the past year. But a major threat faced by the world's second-largest economy is the risk of a potential water crisis which would sink China's economic growth. Earlier in November 2018, two reports by an independent, non-governmental organization: Chinadialogue.net and Greenpeace East Asia emphasized the existential threats that the administration of President Xi Jinping is facing in the wake of climate change, trade war and rising domestic population.<sup>1</sup> Greenpeace East Asia survey disclosed that the momentums of the glacial melt at important sites in Western China have advanced visibly in the present decade. Satellite data displays rapid glacier disappearance in the provinces of Qinghai, Gansu, and Xinjiang Uygur autonomous region. The use of satellite imagery by the Greenpeace reveals two serious disasters triggered by glacial melt. On August 10, 2018, a Glacial Lake Outburst Flood (GLOF) ruptured a natural barrier in the Karakorum

Mountains in Xinjiang, pouring 35 million cubic meters (1.24 billion cubic feet) of floodwater into the Basin of Yarakant River, causing eviction of nearby residents and reducing the drinking-water supply. On October 17, 2018, a glacier disruption led to glacial debris and avalanche of ice into the Yarlung Zangbo River, stopping the river and giving rise to the landslide which displaced 6,600 people along the river. Following the landslide, flood warnings were announced in Arunachal Pradesh and Assam in India.<sup>2</sup>

An energy and climate campaigner with Greenpeace East Asia, Dr.Liu Junyan said: "This is a wake-up call for China and the world and it is critical that we speed up the transition away from coal and other fossil fuels and keep global average temperatures at 1.5 degrees."<sup>3</sup> The dominant issue with the water scarcity lies in the geography of China. 80% of the water reserves in China are situated in the southern provinces, such as Fujian, but the majority of its agricultural production comes from the northern and central regions.<sup>4</sup> In May 2018, a Chinadialogue report, titled "China's

Looming Water Crisis” highlighted that Northern provinces of China experience severe water scarcity and cases of frequent drought, which further brings out the complexities of the geography in precipitating a chronic water shortage. The report further illustrated that “these 12 provinces account for 38% of China’s agriculture, 46% of its industry, 50% of its power generation (coal and nuclear use a lot of water), and 41% of its population.”<sup>5</sup> The glacial melt is a threat to China’s water and national security as they provide water to 1.8 billion people and approximately one-fifth area of a glacier in China has vanished.<sup>6</sup> China manages the headwaters of ten of the eleven crucial rivers of Asia flowing through Vietnam, Afghanistan, North, and Northeastern India and glaciers consist of more than half of “Asia’s Water Tower,” which is the biggest concentration of fresh water apart from the polar regions.<sup>7</sup>

### **So what should the government of Xi Jinping do to tackle the water crisis?**

Recognition of the challenging issue should be the first priority of the Chinese government. The South-North Water Transfer Project (SNWTP) which would reroute 44.8 billion cubic meters of water from the Yangtze River in southern China to northern China in the Yellow River Basin is still not sufficient. If the water of the SNWTP flows to the Beijing/Hebei/Tianjin regions in the North, it would still suffer from acute water scarcity and the project must also supply water to three other arid provinces in the North.<sup>8</sup> Good governance has long been required; competing priorities of industry,

agriculture and power generation in China depends on the responsible decision-making on water resources and accelerating the carbon intensity reduction (China’s 2030 climate targets).<sup>9</sup>

As the demand for water is overriding supply in China and climate change increasing the glacial melting, the government of China continues to develop grave challenges for its own national security and Asia’s water security. Narrating the condition in direct terms, former Chinese Premier Wen Jiabao said that water scarcity “threatened the very survival of the Chinese nation.”<sup>10</sup> For China, water scarcity is an existing security threat undercutting the economic growth and development.

*(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])*

### **Notes**

<sup>1</sup> “Water Crisis Puts Trade War into Perspective for China,” *Asia Times*, November 23, 2018. Available on <http://www.atimes.com/article/water-crisis-puts-trade-war-into-perspective-for-china/>, Accessed on January 3, 2019.

<sup>2</sup> “Greenpeace Survey Reveals Impact of Climate Change on Glaciers in China,” *Greenpeace East Asia*, November 20, 2018. Available on <http://www.greenpeace.org/eastasia/press/releases/climate-energy/2018/Greenpeace-survey-reveals-impact-of-climate-change-on-glaciers-in-China/>, Accessed on January 3, 2019.

<sup>3</sup> Ren Qiuyu and Qin Ziyi, “China’s Rapidly Retreating Glaciers Threatens Water Supply,” *Caixin Global*, November 20, 2018. Available on <https://www.caixinglobal.com/2018-11-20/chinas-rapidly-retreating-glaciers-threaten-asias-water-supply-101349937.html>, Accessed on January 4, 2019.

<sup>4</sup> Caleb Mills, “Water Shortages: China’s Unrecognized Threat,” *Geopolitical Monitor*, June 6, 2018, Available on

<https://www.geopoliticalmonitor.com/water-shortages-chinas-unrecognized-threat/>, Accessed on January 4, 2019.

<sup>5</sup> Charlie Parton, "China is heading Towards a Water Crisis: Will Government Changes Help?" *Chinadialogue*, May 9, 2018 Available on <https://www.chinadialogue.net/article/show/single/en/10583-China-is-heading-towards-a-water-crisis-will-government-changes-help->, Accessed on January 6, 2019.

<sup>6</sup> Sherri Goodman, "Who Controls the Tap? Addressing Water Security in Asia," *Council on Foreign Relations*, October 10, 2018 Available on <https://www.cfr.org/blog/who-controls-tap-addressing-water-security-asia>, Accessed on January 6, 2019.

<sup>7</sup> "Melting Earth: Glacier Retreat and its Impact in China's Cryosphere," *Greenpeace East Asia and Institute of Geological and Natural Disaster Prevention*, 2018 Available on <https://secured-static.greenpeace.org/eastasia/Global/eastasia/publications/Climate%20and%20energy/Glacier%20Media%20Briefing%20-%20English.pdf> Accessed on November 6, 2019.

<sup>8</sup> "South North Water Transfer Project," *International Rivers*, Available on <https://www.internationalrivers.org/campaigns/south-north-water-transfer-project> Accessed on January 7, 2019.

<sup>9</sup> Charles Parton, "China's Acute Water Shortage Imperils Economic Future," *Financial Times*, February 28, 2018 Available on <https://www.ft.com/content/3ee05452-1801-11e8-9376-4a6390addb44>, Accessed on January 7, 2019.

<sup>10</sup> Matthew Carney, "Forget Geopolitics, Water Scarcity Shapes Up as the Biggest Threat to China's Rise," *ABC News*, November 26, 2018 Available on <https://www.abc.net.au/news/2018-11-23/china-water-crisis-threatens-growth/10434116>, Accessed on January 7, 2019.