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Related Categories: Afghanistan; Africa

THE TOXIC ARCTIC

A recent report by the United States Geological Survey indicates that Arctic permafrost holds approximately 15 million gallons of mercury, at least twice the amount in global oceans, land, and atmosphere combined. As rising temperatures melt Arctic permafrost, this mercury could be released into the environment. Mercury is a neurotoxin that poisons humans, often leading to significant health problems or death. Scientists are unsure of how much mercury the permafrost will release, and if it will be in a form that is especially dangerous to human consumption. Once Arctic permafrost warms, plants will begin to grow there and be contaminated by mercury. The microbes that break down dead plants will release methylmercury, which is a more toxic form of mercury, some of which will inevitably spread through water and air into the global ecosystem. A potentially grave concern, according to the Geological Survey, is if Arctic mercury found its way into the human food chain - a development that could lead to a severe global health problem. (*National Geographic*, February 6, 2018)

AFGHANISTAN'S HUNGER PROBLEM

Almost 40 percent of Afghanistan's population of two million now faces an extreme food shortage, the United Nations has warned. According to the UN's Humanitarian Coordinator for Afghanistan, Toby Lanzer, this segment of the Afghan population lives below the poverty line, and needs help acquiring enough food for basic subsistence. Many international organizations are supporting humanitarian efforts in the region, but the Afghan people still need more support. Lanzer is requesting the to U.S. commit \$400 million to the effort. (Tolo News, February 9, 2018)

A NEW METHOD TO TRACK GLOBAL FISHING

Marine data scientists associated with *National Geographic*'s Pristine Seas project have pioneered a new method to monitor worldwide industrial fishing. Using satellites and machine learning algorithms, the researchers found that industrial fishing covers over 55 percent of the ocean's surface, quadruple the area used by agriculture. The researchers could also track where fishing vessels went, what nations they were from, and what caused dips in fishing traffic. (For example, Chinese activity dropped significantly during the Chinese New Year, while other nations' activities dipped in response to the Christmas and New Year holidays.) Fishing, long a vital industry, has often operated with relative obscurity on the high seas, outside of any one country's jurisdiction. Now, this technology can be used to track where different nations are fishing - a development that will undoubtedly impact international treaties regarding global fishing and trade. (*National Geographic*, February 22, 2018)

KENYA'S COAL PLANT CONTROVERSY

The African nation of Kenya may soon have its first-ever coal-fired power plant, a project causing controversy in the region of Lamu, where it would be located. The project is financed by a Chinese bank, and would be built by a Chinese multinational company. Critics are concerned that the coal-fired plant would damage the marine ecosystem that locals rely on, and cause significant pollution. Opponents also argue that the coal plant would undercut Kenya's own commitment to cutting greenhouse gas emissions by 30 percent and its goal of promoting renewable energy. A court case has frozen work on the project while its merits are debated. (*New York Times*, February 27, 2018)

A NEW THREAT TO NIGERIA

Lassa fever, a viral hemorrhagic fever, has made a comeback in Nigeria since the start of the year. While the disease was initially discovered in Lassa, Nigeria, in 1969, the most recent outbreak is "unprecedented." For the majority of people, Lassa only causes mild fever, headache, and fatigue. In more severe cases, however, it mirrors Ebola, causing severe bleeding. Previous iterations of Lassa had a mortality rate of around one percent, but experts suspect that this current outbreak has a mortality rate of around twenty percent. Approximately 90 people have died of the disease so far, but counting the true number of people affected is difficult, because Lassa fever in its early stages is almost "impossible to distinguish" from malaria and dengue fever. No vaccine currently exists. The World Health Organization and the UK government have deployed teams to respond to the outbreak before it becomes a global emergency. (BBC, March 5, 2018)