



RESOURCE SECURITY WATCH

The American Foreign Policy Council's Review of
Changes to the Global Strategic Environment

Resource Security Watch No. 25

March 31, 2020 **Annie Swingen, Rebecca Yim**

Related Categories: Democracy and Governance; Human Rights and Humanitarian Issues; International Economics and Trade; Resource Security; Global Health; Africa; East Africa; Latin America; Southeast Asia

RISING WATER LEVELS THREATEN HUNDREDS OF MYANMAR VILLAGES

Myanmar's villages are falling into the sea, as rising water levels erode riverbanks quicker than expected. The Irrawaddy delta, which houses more than 3.5 million people, is being chipped away by increased sea levels due to climate change. The problem extends beyond mere housing, however; the delta represents Myanmar's largest rice-producing region, and as seawater encroaches on rice paddies and river banks flood more and more often, farmers are being forced to move elsewhere to find farmable land. Rapid erosion in the delta has claimed ten villages in the past four years. If the delta continues to lose arable land, Myanmar will have a much larger population of displaced people on hand, adding to the already-drastic levels of poverty in the country. (Reuters, February 26, 2020; *Global Citizen*, February 28, 2020)

CLIMATE CHANGE TO BRING MORE LANDSLIDES IN THE FUTURE

A new NASA study on potential rainfall in the High Mountains of Asia shows the increased likelihood of landslide activity around mountainous areas on the continent. As weather patterns become more extreme and rainfall intensifies, areas can expect higher numbers of landslides. In particular, the border region between China and Nepal is likely to experience 30-70% more landslide activity, leading to greater flooding, infrastructure damage, and displaced persons. A village in Pakistani-controlled Kashmir has already been leveled by an avalanche that killed more than 41 people this year due to heavy rainfall and snowfall. Help for affected regions, however, is difficult because the terrain complicates emergency response, leaving many local inhabitants at greater risk. (*New York Times*, February 5, 2020; *New York Times*, February 5, 2020; *Science Daily*, February 11, 2020)

LOCUSTS DECIMATE EAST AFRICAN FOOD SUPPLY

East Africa is suffering through the largest number of locust swarms the region has experienced in decades. Since December, locusts have eaten through fertile grazing grounds and crop land in Kenya, Ethiopia, Somalia and Yemen. Hampered by a lack of expertise in dealing with pests on such a large scale, many countries don't possess the resources or know-how to bring their numbers down. Furthermore, because of climate change, weather patterns have created ideal conditions for locust numbers to increase by as much as four hundred-fold if left unchecked. Due to the number of rainstorms experienced in the region in 2019, dormant locust eggs were awoken and scattered farther to areas that do not typically suffer from locusts. Swarms can move up to 93 miles a day, with 40-80 million locusts per square kilometer. Currently, the second generation of locusts is already starting to emerge, and with the coming spring rains, much of the crops and seeds that have been recently planted will be eaten, causing severe food shortages in coming months. This lack of food will worsen the food security of 19 million people, many who already suffer food scarcity due to droughts. (*National Geographic*, February 14, 2020; Reuters, February 27, 2020)

EUROPEAN INFRASTRUCTURE NOT PREPARED FOR CLIMATE CHANGE

A new UN study shows that much of continental Europe's infrastructure is not prepared for the changing climate of the 21st century. As floods, landslides, and other extreme weather patterns increase, the study projects damage costs into the hundreds of millions. Two areas seen as the most vulnerable to the impact of climate change are road and rail infrastructure along the Mediterranean, and ports along the North Sea. Rising temperatures can cause railway tracks to buckle, and the bulk of the transportation infrastructure has not been built to withstand the ferocity and frequency of storms that have accompanied changing climate – creating a potential for transportation and economic disruption on the Continent in the future. (Reuters, February 25, 2020)

TROPICAL FORESTS TO BECOME CARBON EMITTERS

In the coming decade, experts predict, major tropical forests like the Amazon and the Congo Rainforest will reverse their historic roles and become net carbon emitters. Tropical rainforests, long considered the earth's "lungs," are quickly shrinking under drought, higher temperatures, and deforestation, causing the amount of carbon they take in to shrink. This decrease, if not managed, will eventually generate a feedback cycle where, as more and more parts of forests die, heat and drought become even more severe and quicken the further death of the forest at large. Paired with a substantial increase in logging where trees are being cut down to make room for pasture, the major rainforests of the planet will become hotspots for increased heat and drought, causing further ecological and economic strain to the countries that house them – and side effects for the world at large. (London *Guardian*, March 4, 2020; Reuters, March 4, 2020)