

Resource Security Watch: No. 1

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Related Categories: Energy Security; Africa; Central Asia; China; India; Southeast Asia

CHINA MAKES PLANS TO LEAD THE RENEWABLE ENERGY MARKET

China has announced plans to spend more than \$360 billion and create in excess of 13 million jobs through 2020 on renewable power sources such as hydropower, solar and wind energy. According to the U.S. Department of Energy's Energy Information Administration, 10 percent of China's overall energy needs are currently met via renewable sources such as hydroelectric and nuclear power, with renewables accounting for almost a third of the PRC's total electricity needs. The reasons for China's interest appear to be twofold. First, the cost of renewable energy sources has dropped significantly over the past decade, making prices more competitive with the carbon-based energy sources that have served as the mainstay of Chinese energy consumption so far. Secondly, the focus dovetails with the Chinese government's declared intent to minimize pollution and curb greenhouse gas emissions from its industrial production. (New York Times, January 5, 2017)

THE DECLINE OF CENTRAL ASIA'S "WATER TOWER"

The Chinese Academy of Sciences has released a report indicating that the Tianshan mountain range, which stretches for approximately 1,500 miles along the China-Kyrgyzstan border, is experiencing a significant decrease in its total water storage, as well as glacial retreat. Tianshan's snowmelt contributes most of the water for the majority of the rivers in landlocked Central Asia, and acts as the "water tower" of the area, providing the water used in Central Asia for drinking and for agriculture. The Chinese researchers note that the range has been losing total water storage at a rate of 223 million cubic meters (nearly 60 billion gallons) per year. If the depletion continues, the study warns, it could cause significant water-driven conflict between Central Asian nations. (South China Morning Post, January 6, 2017)

CHANGING RAINFALL PATTERNS AND WATER SECURITY IN INDIA

India relies heavily on groundwater to feed its agriculture, especially in the drier regions in the country's north. But that groundwater is becoming increasingly scarce, with satellite imagery showing major declines in groundwater storage throughout India. The reasons are linked to climate. Rising temperatures in the Indian Ocean, scientists say, have created changes in monsoon patterns over India, which in turn are contributing to the decrease in groundwater. The potential impact of the decline is profound, because India relies on groundwater, which is fed by surface precipitation, for drinking, industrial needs, and agricultural purposes. (Science Daily, January 17, 2017)

THE SECURITY IMPACT OF OVERFISHING IN AFRICA

Experts warn that overfishing off the western coast of Africa has led to 37 species of fish being threatened with extinction, and another 14 nearing depletion in the coastal waters stretching from Mauritania in the north to Angola in the south. Fish provide a major protein source for coastal communities in West Africa, which account for 40 percent of the region's population. 6.7 million people depend on small-scale fisheries in West Africa, and fishing contributes \$3 billion annually to African economies. Pollution, warming oceans, and mass illegal fishing by European and Chinese vessels are all contributing to the crisis, which could remove a vital source of food for much of the continent. (London Independent, January 19, 2017)

MONGOLIA'S URBAN BLIGHT

Unusually harsh winters and desertification have decimated livestock populations in rural Mongolia and crippled rural economies, sending former herders into the capital city of Ulaanbaatar by the thousands. These families now live in yurts in what is known as "the ger district," which has over 200,000 households, and use coal to heat their homes because they cannot afford any other heat sources. In January, thousands of Mongolians protested in the streets of the capital over the intense air pollution, which is now worse than in either Beijing or Mumbai. Respiratory infections are one of the leading causes of death among Mongolian children under five. (Deutsche Welle, January 25, 2017; BBC, January 28, 2017)