

ISSUE BRIEF

THE TEMPERATURE IS RISING, THE FEVER WHITE HOT: THE GRAND ETHIOPIAN RENAISSANCE DAM AS FLASHPOINT BETWEEN EGYPT AND ETHIOPIA

NOVEMBER 2020 CHRISTOPHER D. BOOTH

“Tonight, breaking news out of Addis Ababa, with initial reports of the capture of a secret Egyptian commando team by Ethiopian forces near the controversial Grand Ethiopian Renaissance Dam.” Below the anchor, the chyron crawled, “Egyptian special forces captured,” and, over his shoulder, shaky iPhone footage via a green screen showed three blindfolded and flex-cuffed soldiers in camouflage being prodded with Kalashnikovs held by offscreen men.

Once considered unlikely by regional experts, military confrontation is a growing possibility, as a diplomatic solution to the Egyptian-Sudanese-Ethiopian stand-off recedes.¹ In July, Egyptian President Abdel Fattah el-Sisi stated that all options were on the table as he consulted with his military advisors.² Similarly, in a televised address to the nation, he told Egyptians that he would do whatever was required to “protect its historical rights and assets” after Ethiopia began filling the Grand Ethiopian Renaissance Dam (GERD).³ Outside observers may not understand why Egypt considers the GERD an “existential threat” to its existence, but el-Sisi and his advisors surely do.⁴ The regime understands the role that water scarcity may have played in the 2011 Egyptian Revolution that overthrew Hosni Mubarak, and the continuing threat that water pres-

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- 1 Osama al-Sharif, “Egypt Running out of Diplomatic Options on Grand Ethiopian Renaissance Dam Crisis,” *Arab News*, July 28, 2020. <https://arab.news/ykuk5>.
- 2 Hamza Hendawi, “Egypt’s El Sisi Holds Military Meeting Amid Tension with Ethiopia,” *National*, March 3, 2020, <https://www.thenationalnews.com/world/africa/egypt-s-el-sisi-holds-military-meeting-amid-tension-with-ethiopia-1.987671>.
- 3 Hamza Hendawi, “El Sisi: Egypt Will Protect Its Rights and Assets from Nile Dam,” *National*, July 23, 2020, <https://www.thenationalnews.com/world/mena/el-sisi-egypt-will-protect-its-rights-and-assets-from-nile-dam-1.1053783>.
- 4 “Egypt Warns of ‘Existential Threat’ from Ethiopia Dam,” *Al Jazeera*, June 30 2020, <https://www.aljazeera.com/economy/2020/6/30/egypt-warns-of-existential-threat-from-ethiopia-dam>.



Ethiopia's Grand Renaissance Dam is seen as it undergoes construction work on the river Nile in Ethiopia on September 26, 2019. Source: *REUTERS/Tiksa Negeri*

ents to government stability. The Egyptian state already faces a host of issues undermining its authority, and these have only been magnified by COVID-19. The pandemic has particularly damaged the tourism industry, which accounts for 15 percent of Egypt's gross domestic product (GDP).⁵ Furthermore, Ethiopia may be a new venue for Turkish President Recep Tayyip Erdogan to damage his rival, el-Sisi, in the fight for influence in the Sunni Middle East. Egypt's rulers may perceive that their choices are narrowing.

The Grand Ethiopian Renaissance Dam

In April 2011, Ethiopia announced its plan to construct the GERD, a \$5-billion project to build one of the largest dams in the world. (China provided \$4.2 billion in financing.)⁶ Upon completion, it will be the largest dam in Africa, expected to generate up to 6.4 gigawatts of energy (though recent cost-saving measures may have reduced the ultimate output to 5.1 gigawatts of power).⁷ It is intended to provide power to sixty-five million Ethiopians who currently lack access to regular power.⁸ Some suggest Ethiopia's announcement was timed to take advantage of Cairo's distraction with the Egyptian

5 "Coronavirus: Egypt Says All Those Entering Country Must Show COVID-19 Test Results," *Al Arabiya English*, August 19, 2020, <https://english.alarabiya.net/en/coronavirus/2020/08/19/Coronavirus-Egypt-says-all-those-entering-country-must-show-COVID-19-test-results>.

6 Justin Scheck and Scott Patterson, "'Food Is the Ultimate Power': Parched Countries Tap the Nile River Through Farms," *Wall Street Journal*, November 24, 2019, <https://www.wsj.com/articles/exporting-the-nile-outsiders-buy-up-vital-water-supply-11574623318>.

7 Mervyn Piesse, "The Grand Ethiopian Renaissance Dam: Power for Ethiopia, Disaster for Egypt?" *Future Directions International*, June 13, 2019, <https://www.futuredirections.org.au/publication/the-grand-ethiopian-renaissance-dam-power-for-ethiopia-disaster-for-egypt/>; "Power Generation Capacity of GERD Slashed to 5150MW—Ethiopian Minister," *Ezega News*, October 17, 2019, <https://www.ezega.com/News/News-Details/7331/Power-Generation-Capacity-of-GERD-Slashed-to-5150MW-Ethiopian-Minister>.

8 "Nile Dam Dispute: Ethiopia, Egypt and Sudan Agree to Resume Talks," *BBC News*, July 22, 2020, sec. Africa, <https://www.bbc.com/news/world-africa-53494604>.

Revolution.⁹ Egypt is unusually sensitive to any impact on the Nile, because 96 percent of its water comes from the river or aquifers filled by the great river.¹⁰ Agriculture uses 90 percent of available water, and 27 percent of Egypt's energy is produced by the Aswan Dam.¹¹ Therefore, any change in the amount of water would have an immediate impact on the Egyptian economy.

Diplomacy

In March 2015, Egypt, Ethiopia, and Sudan signed a “Declaration of Principles” to reduce tensions and increase cooperation on water sharing.¹² Multiple meetings and summits have followed.¹³ The major stumbling block has been the filling of the reservoir. The GERD's reservoir has a volume nearly 1.3 times that of the annual flow of the Blue Nile (which supplies 85 percent of the water that enters the Nile on its way to Egypt).¹⁴ To put the scale of the reservoir into perspective, when filled it will be approximately the same size as London.¹⁵ Mohamed Nasr Allam, a former Egyptian minister of water, believes that, even if Ethiopia uses most of the water for power generation and eventually allows it to continue downstream (rather than using it for agriculture), Egypt could still lose one quarter of its water.¹⁶

The period during which the GERD's reservoir is filled has the largest potential to adversely impact Egypt's

agriculture and hydroelectric power generation. Most estimates forecast a period of about five years to fill the lake. The impact is subject to a variety of variables, including weather conditions and average rainfall, with “dry seasons” potentially having the greatest impact. There are a variety of models and forecasts, but, ultimately, the effects of the filling “are a spin of the roulette wheel” that depend on a series of unknowns.¹⁷ Some predict only a modest impact on Egypt, though even these analysts agree that the largest negative effects during the first three years of filling would be “experienced by the poorest segments of the urban and rural populations.”¹⁸ Another expert has concluded that—absent agreements to release water from the GERD reservoir during dry periods—in 40 percent of scenarios, Egyptian water users will suffer water shortages within three years of the start of filling.¹⁹ Finally, others have concluded that the “aggregate impacts of the GERD on Egypt...are relatively high compared to estimates from previous studies,” adversely impacting water supply and energy production in Egypt.²⁰

Negotiations between Ethiopia, Egypt, and Sudan have continued (with the United States and World Bank frequently participating). Egypt and Sudan have asked Ethiopia for a period of around seven years to fill the reservoir, while Ethiopia has sought five to six.²¹ In August 2019, Egypt claimed that its annual share of the Nile had decreased by five billion cubic meters, even

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- 9 Griff Witte, “Egypt Sees Ethiopian Dam as Risk to Water Supply,” *Washington Post*, June 18, 2013, <http://www.theguardian.com/world/2013/jun/18/egypt-ethiopia-dam-blue-nile>.
- 10 Jeannie Sowers, “Institutional Change in Authoritarian Regimes: Water and the State in Egypt,” *Comparative Environmental Politics: Theory, Practice, and Prospects*, February 17, 2012, https://scholars.unh.edu/polisci_facpub/84.
- 11 Serge Michailof, *Africanistan: Development or Jihad* (New York: Oxford University Press, 2018).
- 12 “Official Text: Egypt, Ethiopia, Sudan—Declaration of Principles,” *Horn Affairs* (blog), March 25, 2015, <https://hornaffairs.com/2015/03/25/egypt-ethiopia-sudan-agreement-on-declaration-of-principles-full-text/>.
- 13 Daniel Mumbere, “Ethiopia Meeting Diffuses Tension over Dam Project, Leaders to Meet Every 6 Months,” *Africanews*, May 17, 2018, <https://www.africanews.com/2018/05/17/ethiopia-meeting-diffuses-tension-over-dam-project-leaders-to-meet-every-6/>.
- 14 Ghada Soliman, Hoda Soussa, and Sherif Mohamady Elsayed, “Assessment of Grand Ethiopian Renaissance Dam Impacts Using Decision Support System,” *ISOR Journal of Computer Engineering* 18, 5, September–October 2016, https://www.researchgate.net/publication/335320142_Assessment_of_Grand_Ethiopian_Renaissance_Dam_impacts_using_Decision_Support_System.
- 15 Declan Walsh and Somini Sengupta, “For Thousands of Years, Egypt Controlled the Nile. A New Dam Threatens That,” *New York Times*, February 9, 2020, <https://www.nytimes.com/interactive/2020/02/09/world/africa/nile-river-dam.html>.
- 16 Witte, “Egypt Sees Ethiopian Dam as Risk to Water Supply.”
- 17 B. Boehlert, K. Strzepek, and S. Robinson, “Analyzing the Economy-Wide Impacts on Egypt of Alternative GERD Filling Policies,” MIT Joint Program on the Science and Policy of Global Change, 2017, <https://globalchange.mit.edu/publication/17015>.
- 18 Ibid.
- 19 Kevin Wheeler, “Managing Risks While Filling the Grand Ethiopian Renaissance Dam” in Zeray Yihdego, Alistair Rieu-Clarke, and Ana Elisa Cascao, eds., *The Grand Ethiopian Renaissance Dam and the Nile Basin: Implications for Transboundary Water Cooperation* (London: Routledge, 2017), <https://doi.org/10.4324/9781315160122-10>.
- 20 T. N. Kahsay, et al., “Economic Impact Assessment of the Grand Ethiopian Renaissance Dam Under Different Climate and Hydrological Conditions” in Ibid., 158–180.
- 21 Mohammed El-Said, “We Did Not Decide the GERD's Timeframe for Filling the Reservoir Yet, Irrigation Ministry,” *Daily News Egypt*, November 18, 2019, <https://dailynewsegypt.com/2019/11/18/we-did-not-decide-the-gerds-timeframe-for-filling-the-reservoir-yet-irrigation-ministry/>.



President Donald J. Trump, joined by Secretary of the Treasury Steven Mnuchin, meets with the Minister of Foreign Affairs of the Republic of Sudan Asma Mohamed Abdalla, left, the Minister of Foreign Affairs of the Republic of Egypt Sameh Shoukry, and the Minister of Foreign Affairs of the Federal Democratic Republic of Ethiopia Gedu Andargachew, in the Oval Office of the White House on Wednesday, November 6, 2019. Source: *Official White House Photo by Shealah Craighead*

before the reservoir has started being filled.²² In July 2020, Ethiopia announced that it had begun filling the GERD reservoir unilaterally.²³ Diplomatic efforts have not resolved the impasse, and in early September 2020 the Donald Trump administration suspended \$130 million in aid to Ethiopia over its decision to continue filling the reservoir, in an effort to push Addis Ababa to reach a deal.²⁴ Interestingly, in late October 2020, President Trump suggested to the Sudanese prime minister that, if the impasse remains unsolved, Egypt may “end up blowing up the dam.”²⁵

Military Action

Egyptian leaders have long seen a threat in any damming of the Nile, and their use of diplomatic and military threats is nothing new. Former President Anwar Sadat stated that the next war in Northeast Africa would be over water, and it seemed evident that he had Ethiopia in mind.²⁶ Egypt supported Eritrea in its liberation struggle against Ethiopia, and aided Somalia during its invasion of Ethiopia’s Ogaden region in 1977, in an effort to undermine Ethiopia’s ability to disrupt

22 “Egypt, Ethiopia Talk on Filling GERD Reservoir with Water,” *ECADF Ethiopian News* (blog), August 3, 2019, <https://ecadforum.com/2019/08/03/egypt-ethiopia-talk-on-filling-gerd-reservoir-with-water/>.

23 “Ethiopia Says It Has Reached First-Year Target for Filling Divisive Mega-Dam,” *France 24*, July 21, 2020, <https://www.france24.com/en/20200721-ethiopia-says-it-has-reached-first-year-target-for-filling-divisive-mega-dam>; Al-Masry Al-Youm, “Egypt Says Ethiopia’s Unilateral Filling of GERD Contradicts Negotiations,” *Egypt Independent*, July 8, 2020, <https://egyptindependent.com/egypt-says-ethiopias-unilateral-filling-of-gerd-contradicts-negotiations/>.

24 Samuel Gebre, “Trump Suspends Aid to Ethiopia Over Nile River Dam Dispute,” *Bloomberg*, September 2, 2020, <https://www.bloomberg.com/news/articles/2020-09-02/trump-suspends-aid-to-ethiopia-over-dispute-on-nile-river-dam>.

25 Al-Monitor Staff, “Talks on Nile River Dam to Resume on Tuesday,” *Al-Monitor*, October 26, 2020, <https://www.al-monitor.com/pulse/originals/2020/10/gerd-talks-resume-ethiopia-sudan-egypt-nile-river-dam.html>.

26 Michailof, *Africanistan*.

the Nile water supply.²⁷ In 1989, Egypt issued a *démarche* to Ethiopia when Ethiopia hired Israeli hydrologists to survey possible dam sites, and the Egyptian parliament endorsed possible military action.²⁸ In June 2013—after Ethiopia moved ahead with construction of the GERD—then-President Mohamed Morsi convened an emergency cabinet meeting, which he had broadcast live on TV (without apparently telling most of the participants). Egyptian politicians suggested secretly arming Ethiopian rebels, engaging in a psychological warfare campaign, or striking the dam with fighter jets.²⁹

Regional experts question whether Egypt has the ability to militarily impact the GERD. A recent article noted that Egypt's nearest airbase at Aswan is nearly 1,500 kilometers from the dam.³⁰ A limited number of Egypt's more modern and capable military aircraft could reach the site, but only if they obtained overflight from Sudan (which is unlikely, as Ethiopia has purchased Sudanese goodwill by promising a share of cheap power generated by the GERD), Saudi Arabia, or Eritrea.³¹ If they successfully navigated to the target, Egyptian pilots would still face modern Ethiopian air defenses.³² No doubt, el-Sisi and the Egyptian military understand their limitations, but they may face an additional pressure in their calculus: the role of Turkey as a foreign policy adversary.

Turkey

With Egypt indicating that it might intervene in Libya, its rhetorical war of words with Turkey could escalate to actual military conflict.³³ Playing to both domestic and foreign audiences, Erdogan has sought to posi-

tion Turkey at the forefront of Sunni Islam. He not only supported Morsi and the Muslim Brotherhood in Egypt (earning the lasting enmity of el-Sisi and the Egyptian military), but has supported Islamists across the region. Erdogan hosted senior Hamas leaders in late August 2020, including US State Department-designated terrorists subject to \$5-million bounties under the US Rewards for Justice Program.³⁴ The timing was not coincidental, as US Secretary of State Mike Pompeo visited Jerusalem, and Israel and the United Arab Emirates (UAE) established full formal diplomatic relations. Keen observers are aware of the fact that Egypt was the first Arab nation to establish relations with Israel; thus, Erdogan was claiming the mantle of “defender” of the Palestinian cause. Certainly, Ankara and Jerusalem recognize each other diplomatically, but as the years-long row following the *Mavi Marmara* incident (in which Israeli commandos killed and wounded several Turkish demonstrators onboard a ship attempting to run the Gaza blockade) demonstrates, Erdogan has been willing to reduce those ties.³⁵ The Egyptian regime must, therefore, have been concerned in July when Turkish pro-government newspapers reported on the potential for a “strategic alliance” with Ethiopia to match a similar tie to Somalia.³⁶ In July 2020, a special envoy from the Ethiopian prime minister met with the Turkish foreign minister in Ankara, and some believed that Turkey might offer “radar and missile systems” to Ethiopia to defend the GERD.³⁷ Turkey is already the second-largest foreign investor in Ethiopia, with more than \$2.5 billion invested in the country.³⁸ None of this can be comforting to leaders in Cairo, who well understand how perilous Egypt's water situation is, even without the GERD in full operation.

27 Ibid.

28 Ibid.

29 Witte, “Egypt Sees Ethiopian Dam as Risk to Water Supply.”

30 “Africa Insiders: Egypt Finds Itself Downstream without a Paddle,” *African Arguments*, January 15, 2020, <https://africanarguments.org/2020/01/15/africa-insiders-egypt-ethiopia-gerd-downstream-without-paddle/>.

31 Ibid.

32 Ibid.

33 “Egypt Seeks Support of Libya Tribes amid Threat of Intervention,” Al Jazeera, August 20, 2020, <https://www.aljazeera.com/news/2020/8/20/egypt-seeks-support-of-libya-tribes-amid-threat-of-intervention>.

34 Seth J. Frantzman, “Turkey's Erdogan Hosts Large Hamas Delegation with Wanted Terrorist,” *Jerusalem Post*, August 23, 2020, <https://www.jpost.com/middle-east/turkeys-erdogan-hosts-large-hamas-delegation-with-wanted-terrorist-639597>; Joseph Haboush, “US Criticizes Erdogan for Meeting with Hamas Leadership, Warns of Turkish Isolation,” *Al Arabiya English*, August 25, 2020, <https://english.alarabiya.net/en/News/middle-east/2020/08/25/US-criticizes-Erdogan-for-meeting-with-Hamas-leadership-warns-of-Turkish-isolation>.

35 “Mavi Marmara: Why Did Israel Stop the Gaza Flotilla?” BBC News, June 27, 2016, <https://www.bbc.com/news/10203726>.

36 Fehim Taştekin, “Turkey's Militarized Africa Opening Fuels Influence Wars,” *Al-Monitor*, August 31, 2020, <https://www.al-monitor.com/pulse/originals/2020/08/turkey-africa-opening-fuels-cloud-wars-libya-somalia-niger.html>.

37 Ibid.

38 Seleshi Tessema, “Mutual Growth Drives Turkish Investment in Ethiopia,” Anadolu Agency, January 17, 2020, <https://www.aa.com.tr/en/africa/mutual-growth-drives-turkish-investment-in-ethiopia/1705411>.



The Nile River and delta as seen from space, captured by the Terra MODIS instrument on February 5, 2003. Source: Jacques Descloitres, MODIS Rapid Response Team, NASA/GSFC

Water Scarcity

Every person requires one hundred cubic meters (m^3) of water each year for drinking and personal needs, and another one thousand are required to grow the food to feed that person for a year.³⁹ At the time of the demonstrations in Tahrir Square, Egypt was already in a “water crisis” in which it had fallen below the global standard for “water poverty” (one thousand m^3 per person per year) to seven hundred m^3 .⁴⁰ The water scarcity caused a jump in the cost of food, because of the increased cost for agricultural inputs.⁴¹ Some see this increase in food prices resulting from the region’s freshwater crisis as an underappreciated trigger of the Arab Spring.⁴² Egypt suffered then, and now, from a Malthusian quandary of fixed water supplies, increas-

ing population, and an increased demand for water from various users.⁴³ Some of that increased demand was from lavish gated communities and golf courses built by elite land developers through self-dealing in state rents, and built from the desert for an elite clientele.⁴⁴ In contrast, the one million residents of “Garbage City” lived in an area of just 4.5 square miles without adequate infrastructure, where 75 percent of the water tested by a non-governmental organization (NGO) failed to meet minimum standards for drinking water.⁴⁵ Several analysts of the 2011 uprising believe that it was really a “Revolution of the Thirsty.”⁴⁶ While the immaculate lawns in the wealthy enclaves stayed emerald, 40 percent of Cairo’s population had no more than three hours a day of running water, and four dis-

39 Jason J. Morrisette and Douglas A. Borer, “Where Oil and Water Do Mix: Environmental Scarcity and Future Conflict in the Middle East and North Africa,” US Army War College, 2004, <https://apps.dtic.mil/dtic/tr/fulltext/u2/a596937.pdf>.

40 Brahma Chellaney, *Water, Peace, and War: Confronting the Global Water Crisis* (Lanham, MD: Rowman & Littlefield Publishers, 2015).

41 Ibid.

42 Ibid.

43 Sowers, “Institutional Change in Authoritarian Regimes: Water and the State in Egypt.”

44 Karen Piper, *The Price of Thirst: Global Water Inequality and the Coming Chaos* (Minneapolis: University Of Minnesota Press, 2014).

45 Ibid.

46 Asef Bayat, “Plebeians of the Arab Spring,” *Current Anthropology* 56, S11, October 1, 2015, S33–43, <https://doi.org/10.1086/681523>.

districts received no drinking water at all.⁴⁷ Sizeable protests erupted in 2007 and 2008 throughout the Nile Delta over reductions in water, and even massive deployments of riot police were unable to stop protesters from blocking highways and railroads.⁴⁸ While it was not the sole factor sparking the Arab Spring revolution, it is clear that frustrations with the difficulty of obtaining the basic necessity of sanitary water primed millions of Egyptians' outrage, and were no doubt an inseparable factor in Egyptians' willingness to go into the streets against the Mubarak regime.

Current and Future Stressors

Water may continue to contribute to potential instability in Egypt, as the population continues to grow and water demand increases. The entire Nile watershed is predicted to be strained to the point where, in 2050, the population of Egypt, Sudan, and Ethiopia averages 743 m³ per person, and some estimates for Egypt are as low as 590 m³ per person by 2025.⁴⁹

Historically, Egypt and other Middle East and North Africa (MENA) countries have focused on supply, rather than addressing demand.⁵⁰ Addressing demand has been a low priority for these governments, despite the reality that climate change and population growth will further impact water use. Sea-level rise and increasing salinity may affect 10 percent of the population and ruin 12-15 percent of Egypt's agriculture.⁵¹ The Egyptian Water Ministry has recognized that Egypt has reached the limit of what it can do from the supply side (while also admitting that it has over-invested in mega-projects).⁵² There appears to be room to increase efficiency in the use of Egypt's water (outside of limiting the development of water-intense luxury properties). At least one study estimated that Egypt's irrigation system is only 48-percent efficient, in con-

trast to the Jordan Valley's 100-percent efficiency.⁵³ Similarly, Egypt's dilapidated infrastructure ensures that as much as 35 percent of residential water leaks before it ever reaches a tap; fixing these deteriorating pipes could lead to another eleven million citizens having access to fresh water.⁵⁴

What water Egyptians do receive is often tainted due to poor sanitation. Many are so desperate for water that they pump it from irrigation ditches (filled with agricultural run-off with fertilizers, pesticides, pathogens, and heavy metals such as arsenic, lead, mercury, and cadmium) or buy it in trucks (where it is often tainted from being stored in tanks usually used to haul gasoline or other products). A 2015 study indicated that "95.5 percent of the population drinks improperly treated water."⁵⁵ With much of the Nile's water now going to irrigate industrial farms that export food to wealthy countries such as Saudi Arabia (Saudi Arabia and the UAE control about 383,000 acres of land in Egypt, which are used to grow crops for export back to these rich Gulf states), poor Egyptian farmers are more frequently turning to irrigating their crops with treated sewage water.⁵⁶ This polluted water frequently spreads "cancer" to the foodstuff, a colloquial description for diseases that prevent the germination of plant seeds.⁵⁷

No Easy Way Out

The political, economic, and cultural situation in Egypt is similar to that at the end of 2010, prior to the revolution. The government has undertaken no substantial reforms, elite corruption continues, and the economic situation for most Egyptians has not improved. Prior to the worldwide economic downturn caused by the pandemic, Egypt existed as a paradox: it was seen as a success story for investors looking for an attractive play in emerging markets, yet 60 percent of its popu-

47 Ibid.

48 Ibid.

49 Michailof, *Africanistan*; Jeannie Sowers, Avner Vengosh, and Erika Weinthal. "Climate Change, Water Resources, and the Politics of Adaptation in the Middle East and North Africa," *Climatic Change* 104, 3-4, February 2011, 599-627, <https://doi.org/10.1007/s10584-010-9835-4>.

50 Ibid.

51 Ibid.

52 Ibid.

53 Sandra Ruckstuhl and Christopher Ward, *Water Scarcity, Climate Change and Conflict in the Middle East: Securing Livelihoods, Building Peace* (London: I.B. Tauris, 2017).

54 Mohamed Ezz and Nada Arafat for Mada Masr, "'We Woke up in a Desert'—the Water Crisis Taking Hold across Egypt," *Guardian*, August 4, 2015, <http://www.theguardian.com/world/2015/aug/04/egypt-water-crisis-intensifies-scarcity>.

55 Ibid.

56 Scheck and Patterson, "'Food is the Ultimate Power.'"

57 Ibid.

lation “is either poor or vulnerable.”⁵⁸ As of 2019, the government spent 58 percent of its budget just to pay off loans and interest on its debt.⁵⁹

The last months of 2019 saw a series of protests, despite repressive efforts by the government. In September, violent protests against government corruption spread across five provinces.⁶⁰ To gain control of the streets, in September and October, the regime cracked down on the political opposition, jailed people who refused to allow security forces to check their phones, and, by the end of October, had arrested more than 4,300 people.⁶¹ There were reports of detainees being “stripped, beaten, strangled and burned with cigarettes” in an effort to stop protests against declining living standards and political repression.⁶² Many Islamists and supporters of the Muslim Brotherhood are still angry with the el-Sisi regime for the coup against Morsi, and are biding their time until they have a chance for revenge.⁶³ Finally, Egyptian military and security forces continue to fight a stubborn insurgency and Islamic State of Iraq and al-Sham (ISIS)-linked terrorism in the Sinai Peninsula.⁶⁴

El-Sisi and the generals appear ready to wade into Libya’s ongoing catastrophe to shore up their western flank. Given the inconclusive diplomacy of the West regarding the real threat the GERD poses to the regime’s interests, and to the people of Egypt, the government may conclude that it has no other choice but to take up arms against its “oppressors,” and roll the dice in an attack against the dam.

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58 Yehia Hamed, “Egypt’s Economy Isn’t Booming. It’s Collapsing,” *Foreign Policy*, June 7, 2019, <https://foreignpolicy.com/2019/06/07/egypts-economy-isnt-booming-its-collapsing-imf-abdel-fattah-sisi-poverty/>.

59 Ibid.

60 Ibid.

61 Ezzedine C. Fishere, “Egypt’s Dictatorship Is Sitting on a Powder Keg,” *Washington Post*, October 17, 2019, <https://www.washingtonpost.com/opinions/2019/10/17/egypts-dictatorship-is-sitting-powder-keg/>.

62 Jared Malsin and Amira El-Fekki, “Egypt Accused of Using Torture to Thwart Protests,” *Wall Street Journal*, October 26, 2019, <https://www.wsj.com/articles/egypt-accused-of-using-torture-to-thwart-protests-11572084002>.

63 Fishere, “Egypt’s Dictatorship Is Sitting on a Powder Keg.”

64 Omar Ashour, “Sinai’s Stubborn Insurgency,” *Foreign Affairs*, November 8, 2015, <https://www.foreignaffairs.com/articles/egypt/2015-11-08/sinai-stubborn-insurgency>; David E. Thaler and Yousuf Abdelfatah, *Making Headway Against the Sinai Insurgency*, RAND, August 12, 2019, <https://www.rand.org/blog/2019/08/making-headway-against-the-sinai-insurgency.html>; Allison McManus, “ISIS in the Sinai: A Persistent Threat for Egypt,” Center for Global Policy, June 23, 2020, <https://cgpolicy.org/articles/isis-in-the-sinai-a-persistent-threat-for-egypt/>.



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