

Threats to Stability in Jordan

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In the aftermath of the so-called Arab Spring, Jordan has thus far remained stable, but its continued stability should not be taken for granted. This article discusses the current threats to Jordan's stability, the long term challenges that must be addressed, and Israel's interest in maintaining Jordan's stability. International aid has shielded Jordan from instability to date, but Jordan faces a growing Salafist jihadi threat, fueled largely by the country's poor economy. In the fall of 2012, Saudi Arabia, the UAE, Kuwait, and Qatar finalized a plan to donate \$1.25 billion each to Jordan over five years, for a total of \$5 billion. The United States plans to increase aid to Jordan from \$660 million per year to \$1 billion per year, but this aid is intended for short term needs.¹

In addition to foreign aid, the current low oil prices will buoy the economy, and the wave of patriotism that has swept over Jordan in the wake of the death of the pilot Muath al-Kasasbeh in early 2015 will help turn the tide temporarily against Salafist jihad. However, presumably the oil prices will not stay low forever, the wave of patriotism will recede, and donor fatigue will set in. Jordan and its allies must tackle long term risk factors, led by problems that a large migrant society creates, such as growing unemployment, water shortages, and energy scarcity, to improve Jordan's prospects for future stability.

Jordan's Poor Economy and Lack of Room for Political Expression

Jordan's poor economy has fueled a growing Salafist jihadi movement, with dangerous implications for the kingdom's security. The official unemployment rate is 13 percent, youth unemployment is 30 percent,² and the poverty rate is 15-30 percent.³ According to a 2014 Pew Foundation survey,

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61 percent of respondents described the economy as “bad” or “somewhat bad,”⁴ even though sustained low oil prices should temporarily boost the economy. Underlying causes of the high youth unemployment rate include an education system that does not provide graduates with crucial problem solving and language skills, and a preference among Jordanian youth for areas of study and careers that are not in high demand.⁵ Unemployment often lasts for a considerable period,⁶ which leads to frustration among youth, which can lead them toward an alternative to the current – inadequate – establishment, in the form of radical Islam. The high unemployment rate has also been coupled with the influx of Syrian refugees. While officially not allowed to work, the refugees have entered the informal sector in an already difficult job market, causing resentment among locals.

These economic woes join a lack of avenues for youth to express themselves politically. Like much of the Arab world, Jordan experienced Arab Spring protests in 2011, though on a smaller scale than those in Egypt or Tunisia. While the demonstrators demanded greater democratization, little real reform has occurred, and in the words of the Jordanian Muslim Brotherhood’s spokesman, “There is a tangible increase in the number of supporters [of Salafist jihad] in the street. People lost hope, particularly the young, and they feel the Salafi ideology...will give them what they want.”⁷

According to Mona Alami, there are approximately 15,000 Salafists in Jordan, including about 5,000 jihadists;⁸ other experts and the Jordanian government estimate that there are 9,000-10,000 Salafist jihadis in Jordan, which is double the number before the Arab Spring.⁹ While Jordan’s jihadis have traditionally been mainly Palestinian, growing numbers of East Bank Jordanians are joining the movement.¹⁰ This is significant because East Bank tribes have traditionally formed the bedrock of the monarchy’s support. However, as a recent report by the Council on Foreign Relations clarifies, East Bankers in outlying cities believe that the government does not provide them with enough services. Significant opposition to the regime from East Bankers could be the most serious threat to Jordan’s stability, because the country’s military and security services are largely composed of East Bankers.¹¹

The government closely watches Salafists and has used an amended anti-terrorism law to arrest citizens for inciting terrorism online.¹² The Ministry of Islamic Affairs is pressuring imams to preach moderate Islam, and as of November 2014, the government had banned 30 preachers.¹³ By

December 2014, Jordanian authorities had arrested between 200 and 300 suspected Islamist militants.¹⁴

According to Tamer Samadi, a Jordanian journalist who is an expert on jihad, 85 percent of Jordanian Salafist jihadis now sympathize with the Islamic State (IS).¹⁵ It is unclear if there is an organized IS presence in Jordan, though IS enjoys grassroots support, which can be seen in YouTube videos of pro-IS rallies in Ma'an and Zarqa. For its part, IS released a video expressing support for Ma'anis and calling for the destabilization of Jordan. There is also evidence of IS support in the Irbid area from a number of incidents in the fall of 2014, including the arrest of a young Salafist jihadi for waving an IS-style flag at a wedding,¹⁶ the arrest of another young resident for posting an IS video on Facebook,¹⁷ and the arrest of a cell of eleven IS supporters in northern Jordan.¹⁸

Indeed, in the fall of 2014, levels of support for IS were not insignificant. Estimates in the Jordanian press put the number of Jordanian volunteers in Syria with IS in the 1,000-1,500 range, of whom 250 were killed in the fighting. In a poll conducted by the Centre for Strategic Studies (CSS) at the University of Jordan, most respondents considered IS a terrorist organization, though 10 percent did not.¹⁹ A poll by the Washington Institute for Near East Policy found that 8 percent of respondents expressed a positive view of IS.²⁰ Moreover, before al-Kasasbeh's murder, a significant portion of Jordanians did not support their country's participation in the coalition airstrikes. Conspiracy theories that IS was an American or Israeli creation circulated,²¹ and #ThisIsNotOurWar was a trending hashtag on Twitter.²²

A Temporary Surge in Patriotism

The murder of al-Kasasbeh prompted a backlash against extremism and increased support for Jordan's participation in coalition airstrikes.²³ One month after the murder, King Abdullah delivered a rousing speech, with the refrain "hold your head high." A few days later, this refrain was a leading hashtag on Twitter.

A CSS poll conducted in February 2015 shows significant increases in support for the Jordanian government and Jordan's participation in coalition airstrikes, as well as an increase in the belief that IS and al-Qaeda are terrorist organizations. Eighty-nine percent of respondents supported Jordan's participation in the coalition, and 95 percent considered IS a terrorist organization, compared with 72 percent in December 2014. Moreover, 70 percent considered al-Qaeda a terrorist organization, compared with 46

percent in December 2014, and 74 percent believed that Prime Minister Ensour's government was able to handle its responsibilities, compared with 56 percent in December 2014. The director of the CSS believes that in addition to al-Kasasbeh's murder, the government's handling of the winter's snowstorms and the lower oil prices contributed to the sense of improved government performance.²⁴

At the same time, the campaign has been met with some opposition. Tarek al-Khoury, an MP from impoverished Zarqa, wrote on Twitter that Jordanians would hold their heads higher if the Israel-Jordan peace treaty were cancelled, the Israeli ambassador were expelled, and the recent water agreement between Jordan and Israel were cancelled; if Jordan's National Electric Power Company (NEPCO) did not follow through with plans to buy electricity from Israel; and if Ahmed Daqamseh, a Jordanian soldier who murdered seven Israeli schoolgirls in 1997, were honored as a hero. In response, a parliamentary committee recommended revoking al-Khoury's parliamentary immunity for insulting King Abdullah and Jordanians. The case against him was dropped and al-Khoury apologized.²⁵ Similarly, Munther al-Kasawneh, a Jordanian diplomat, referenced the "hold your head high" phrase in a Facebook post in which he allegedly insulted Jordan's foreign minister. This resulted in his resignation.²⁶

Yet despite the backlash against extremism in Jordan, the threat of IS sympathizers or cells carrying out operations in Jordan is real. This is evidenced by the arrest of an IS cell composed of six Syrian refugees in Mafraq on March 17, 2015.²⁷ Mafraq is a poor city that contains the Zaatari refugee camp and an especially large Syrian refugee population. As journalist Alice Su cautions, "Jordanian opposition to ISIS doesn't necessarily indicate a broader rejection of militant jihad. Instead, many Jordanians are engaged in a debate about the boundaries and legitimacy of violent extremism."²⁸

Water Scarcity Could Breed Instability in Jordan

Ultimately, the backlash against extremism and surge in support for the government is likely to be temporary if Jordan and its benefactors do not make substantial progress toward key domestic challenges, among them economic, water, and energy issues. Water scarcity can be a catalyst of political instability, as in Syria. According to a 2011 report, the Assad regime mismanaged Syria's water resources, and a proliferation of wells and poor urban infrastructure depleted crucial groundwater stocks. From

2006 to 2011, large swaths of Syria experienced a terrible drought. Farmers had difficulty weathering the drought because groundwater resources they could have used were depleted. Large scale internal migration resulted, fueling instability.²⁹

As of 2011, Jordan had only 110 m³ of renewable freshwater resources per capita per year.³⁰ Countries that have less than 500 m³ per person per year are said to experience absolute water scarcity, according to the commonly used Falkenmark Index.³¹ Moreover, the influx of 1.5 million Syrian refugees means that Jordan is even more water-scarce per capita than it was in 2011. Foreign donor organizations are involved in numerous projects in Jordan's water sector, but it remains dysfunctional.

One of the most important problems is non-revenue water (NRW), which is water in a utility system that cannot be accounted for by the time it reaches end users. Leakage, illegal usage, poor accounting, and dysfunctional water meters are several contributing factors to NRW. In 2012, NRW for Jordan as a whole was estimated to be 41 percent.³² While NRW in Amman was lower,³³ the NRW rate in Mafraq in 2011, with large numbers of Syrian refugees, was estimated at 67 percent.³⁴ Although Israel and Jordan recently signed an agreement whereby Israel will give water from the Sea of Galilee to Jordan in exchange for desalinated water from Aqaba, international donors must help Jordan tackle NRW through more effective leak detection, an adequate system of enforcement and punishment for illegal use, and improved billing and collection.

Climate change could lead to a 98 percent decrease in Jordan's water resources, and unmet water demand could increase by more than 200 percent if Jordan's water sector does not improve.³⁵ According to Kelley et al., "The migration [in Syria] in response to the severe and prolonged drought exacerbated a number of the factors often cited as contributing to the unrest, which include unemployment, corruption, and rampant inequality."³⁶ This makes the comparison between Syria and Jordan even more striking because Jordan too suffers from unemployment, corruption, and inequality. Between 2010 and 2011, Syria's youth unemployment rate increased from 19 to 34 percent,³⁷ a level comparable to Jordan's. Thus, inefficient water use in Jordan, exacerbated by increasingly dry conditions, could be a significant risk factor for instability.

Energy Scarcity Amplifies Jordan's Economic Woes

Maintaining long term stability in Jordan also requires alleviating Jordan's energy shortage, since energy imports comprise over 40 percent of Jordan's annual budget.³⁸ Energy imports have a negative effect on stability by harming Jordan's economy in multiple ways. Jordan used to generate cheap electricity from Egyptian natural gas, but repeated attacks on the gas pipeline running through Sinai have forced Jordan to import expensive petroleum products. The resulting economic damage was valued at 2 percent of Jordan's GDP. In addition, electricity subsidies are the biggest burden on the country's budget.³⁹ Low oil prices may allow heavily indebted NEPCO to recover its costs for 2015,⁴⁰ but ultimately Jordan will need to find other energy sources. Jordan has a strategy for diversifying its energy by 2020, with 10 percent coming from renewable resources (wind and solar), 14 percent from oil shale, 6 percent from nuclear energy, 29 percent from natural gas, 1 percent from imported electricity, and the remaining 40 percent from petroleum products.⁴¹ While this strategy looks good on paper, it is fraught with problems.

First, it is unclear from where Jordan will import natural gas. Currently, Jordan imports expensive gas from Qatar. The partners in Israel's Leviathan gas field had signed a preliminary agreement to sell gas to NEPCO. However, an anti-trust dispute between the Israeli government and the owners of the Tamar and Leviathan fields have halted the negotiations, with Jordan announcing that it would buy gas from the Gaza Marine field.⁴² Importing gas from Israel makes economic sense but has led to protests among the Jordanian public.⁴³ In December 2014, it was reported that 15 MPs in the 150-member Lower House of Parliament threatened to resign and 20 MPs in the Lower House would initiate a motion of no confidence in the government of Prime Minister Ensour if a gas import deal with Israel were signed. In addition, the Lower House recommended that the government not sign the deal.⁴⁴ Importing gas from the Gaza Marine field would be more politically palatable, if and when the field becomes operational.

Second, while Jordan possesses potential for wind and solar power, progress in implementing these projects is slow. The government's energy strategy calls for 1,200 MW of wind power capacity by 2020⁴⁵ and the first planned wind farm is the Tafila Wind Farm, which will have a capacity of merely 117 MW.⁴⁶ So far only one turbine of 38 planned turbines in Tafila has been erected.⁴⁷

Jordan also plans to have 600 MW worth of solar power generation capacity by 2020.⁴⁸ The royal palace is presenting itself as a leader in this direction, installing solar panels on the roofs of the main buildings. In the spring of 2014, it was reported that the Jordanian government had signed a total of twelve agreements with companies to build renewable energy projects in Jordan, and that these projects would be producing power by mid-2015.⁴⁹ However, as of January 2015, there is no evidence that any of these projects is even close to completion.⁵⁰

The government's plan for oil shale to comprise 14 percent of its energy use by 2020 is also doubtful. Jordan possesses large oil shale deposits, but oil shale is not the same as light tight oil and has yet to be commercially extracted. The Jordanian government has signed a number of deals and interim agreements with companies to explore and develop oil shale in Jordan, but it is unclear if they will result in actual production. For example, Royal Dutch Shell will not decide whether to invest in projects on the commercial scale until the late 2020s.⁵¹ Enefit, an Estonian company, plans to construct Jordan's first oil shale-fired power plant, which will have a capacity of 550 MW. However, the plant will not be operational until late 2018.⁵² Another issue is that the current price of Brent crude is around \$60 per barrel and Enefit's plants are profitable at prices above \$75 per barrel.⁵³ While a low oil price reduces the cost of Jordan's expensive oil imports, it also makes developing its vast oil shale reserves nonviable.

Finally, Jordan's nuclear program may never come to fruition, and certainly not by 2020. In December 2014, the Russian company Rostam signed a draft agreement with the Jordanian government to build a reactor with two units, each with a capacity of 1,000 MW. However, the first of these units would not be ready until 2024.⁵⁴ Jordan would be responsible for financing approximately 50 percent of the \$10 billion price tag,⁵⁵ which is a huge sum for Jordan. According to Ali Ahmad, a researcher at Princeton University, a combination of solar energy and natural gas may be cheaper for Jordan – not to mention the substantial domestic and international opposition to the nuclear project.⁵⁶

While energy prices are currently low, Jordan's vulnerability to high cost imports damages the economy in multiple ways. The most direct impact is that high energy prices increase the cost of living for cash-strapped Jordanians. Moreover, to the extent that Jordan's government continues to spend heavily on energy subsidies, this will divert vital funds from other initiatives like education and water sector reform that are vital for Jordan's

long term stability. In addition, this inefficient fiscal policy of subsidies will crowd out private sector investment. Jordan and its allies must work to diversify Jordan's energy portfolio. This would help lower the cost of living for poor Jordanians, create jobs domestically, and spur private sector investment. In this way, a more diversified energy sector would help counteract the poor economic conditions in the kingdom that are fueling the rise in Salafist jihad, and place the kingdom on a more secure footing that is less dependent on foreign aid.

Israel's Interest in Jordan's Stability

Israel has a clear interest in the stability of many states both in and out of the Middle East, including Jordan. In the past, Jordan's ability to cope with domestic problems and external pressure has been boosted by Israel's response to regional developments and readiness to assist. Israel's interest in Jordan's stability has been amplified in recent years by profound regional changes, particularly as Israel has become increasingly wary of radical Islamic movements in Iraq and Syria.

The 1994 Israel-Jordan peace treaty granted Jordan custodianship over the Muslim holy sites in Jerusalem, and the government of Israel agreed to consult with Jordan on certain issues related to the Temple Mount/Haram a-Sharif. Israel's government responded favorably to King Abdullah's request to allow more than 50,000 Muslim worshippers at the Haram a-Sharif on Fridays, despite the security burden that this entails.

In view of the dramatic rise in water needs because of the influx of Syrian refugees, Israel and Jordan have reached agreement on additional quantities of water to be supplied to Jordan once the method of conveyance on the Israeli side of the system is determined. This agreement will help alleviate Jordan's water scarcity issues, but water sector reform and NRW reduction will continue to be vital.

The potential supply of natural gas from Israel to Jordan will also contribute to easing Jordan's economic burden, if and when it comes to fruition. Despite the strong opposition to the deal in parliament, Jordan's government appears determined to proceed. The anti-trust dispute in Israel is delaying the completion of this deal, which will make Jordan less dependent on more expensive imports.

The civil war in Syria has caused the closure of Syrian ports to Jordanian traffic. Jordan's exports now depart from Haifa, since it is the only viable option. Assuming that the situation in Syria will not improve soon, there

are currently preparations underway to improve the facilities in use for the Jordanian export-import process.

The Palestinian issue remains very sensitive in Israeli-Jordanian-Palestinian relations. The Jordanian government is aware of the domestic political constraints both in Israel and the Palestinian Authority that make meaningful negotiations challenging. However, Jordan requires at least a semblance of progress in the peace process to maintain the legitimacy of its claim to be a champion of Palestinian statehood and keep its Palestinian majority satisfied. The current (2014-2015) Jordanian membership in the UN Security Council further complicates Jordan's delicate balancing act of trying to advance its security and economic interests and satisfy its political allies in the Arab League.

The Israeli government is well aware of Jordan's increased security burden, and the bilateral coordination has likely increased, as both Jordan and Israel face new threats created by the expansion of radical Islamic movements. At the same time, despite the political sensitivity, it is important to urge Jordan to expedite the internal processes that will enable the supply of water and gas from Israel. Allowing greater access for Jordanian products, especially to the Palestinian market, can also help the Jordanian economy. Greater use of the Port of Aqaba by Israeli exporters and importers can also generate mutual benefit. The risk that destabilization in Jordan would pose to Israel is all too clear, given the long border that the two countries share. As such, Israel must do everything in its power to ensure quiet on its eastern border.

Conclusion

The Hashemite Kingdom of Jordan is surprisingly resilient in meeting the enormous challenges imposed by the volatile region. Its ability to continue to face threats will depend to a large extent on continued financial assistance, mostly from Arab oil producing countries and the United States. This financial assistance must provide long term support that addresses the inefficiencies in Jordan's water sector and helps diversify Jordan's energy sector, in addition to crucial humanitarian aid and other short term support. The immediate threat posed by the Islamic State is not necessarily a frontal attack. Instead, the greater risk is that IS could exploit pockets of poverty and unemployment in Jordan's population that have traditionally been the base of support for the regime. Financial resources are needed to maintain the loyalty of East Bankers by improving their economic conditions.

Israel, which has shown a growing involvement in shoring up its neighbor's stability, should continue to do so, as it is clear that the dust is far from settling in the Middle East.

Notes

- 1 Larry Downing, "U.S. Plans to Boost Aid to Jordan to \$1 Billion per Year," *Reuters*, February 3, 2015, <http://www.reuters.com/article/2015/02/03/us-jordan-aid-idUSKBN0L72ET20150203>.
- 2 Ryan Andrew Brown et al., *Youth in Jordan: Transitions from Education to Employment* (Santa Monica, CA: RAND Corporation, 2014), p. ix.
- 3 Jeremy M. Sharp, *Jordan: Background and U.S. Relations*, report (Washington, D.C.: Congressional Research Service, 2014), p. 11.
- 4 "Jordan: Country's Economic Situation," Pew Research Centers Global Attitudes Project, <http://www.pewglobal.org/database/indicator/5/country/111/>.
- 5 Brown et al., *Youth in Jordan*, pp. 10, 16.
- 6 Valentina Barucci and Nader Myran, *Labour Market Transitions of Young Women and Men in Jordan*, report no. 14, June 2014, pp. 1, 4, 32, http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_245876.pdf.
- 7 "ISIS Support Grows in Jordan Town," *al-Arabiya*, December 6, 2014, <http://english.alarabiya.net/en/perspective/features/2014/12/06/ISIS-support-grows-in-jordan-town.html>.
- 8 Mona Alami, "The New Generation of Jordanian Jihadi Fighters," *Sada*, February 18, 2014, http://carnegieendowment.org/sada/index.cfm?fa=show&article=54553&solr_hilite=Alami.
- 9 "ISIS Support Grows in Jordan Town."
- 10 Mona Alami, "Jordan's Salafists Switch Allegiance to IS," *al-Monitor*, April 20, 2015, <http://www.al-monitor.com/pulse/originals/2015/04/jordan-ammman-is-nusra-militants-salafi-jihadists.html>.
- 11 Robert Satloff and David Schenker, *Political Instability in Jordan*, Contingency Planning Memorandum No. 19, May 2013, <http://www.cfr.org/jordan/political-instability-jordan/p30698>.
- 12 William Booth and Taylor Luck, "Jordan Cracks Down on Islamic State on Facebook and Twitter," *Washington Post*, October 14, 2014, http://www.washingtonpost.com/world/middle_east/jordan-cracks-down-on-islamic-state-on-facebook-and-twitter/2014/10/12/6c4ed348-415a-4395-9e3d-7ec0377543df_story.html.
- 13 William Booth and Taylor Luck, "To Counter Rise of Islamic State, Jordan Imposes Rules on Muslim Clerics," *Washington Post*, November 10, 2014, http://www.washingtonpost.com/world/middle_east/to-counter-rise-of-the-islamic-state-jordan-imposes-rules-on-muslim-clerics/2014/11/09/4d5fce22-5937-11e4-bd61-346aee66ba29_story.html.

- 14 David Schenker, "The Chaos in the Middle East is Hurting One of America's Top Arab Allies," *Business Insider*, December 5, 2014, <http://www.businessinsider.com/david-schenker-jordan-is-facing-a-major-backlash-2014-12>.
- 15 Alami, "Jordan's Salafists Switch Allegiance to IS."
- 16 Maher al-Shawabkeh, "Jordan: Arrest of a Man Flying a Daesh Flag at a Wedding," 24, September 11, 2014, <http://goo.gl/OTbdZe>.
- 17 Booth and Luck, "Jordan Cracks Down on Islamic State on Facebook and Twitter."
- 18 "Abu Sayyaf: Jordan's Participation in the Air Campaign in Syria is the 'Beginning of the End,'" *Ordun al-Akhbaria*, September 23, 2014, <http://goo.gl/C2LjF>.
- 19 Walid al-Khatib, *Public Opinion Poll about Some Current National and Regional Issues*, report, September 2014, p. 28, <http://www.jcss.org/Photos/635478413205219966.pdf>.
- 20 David Schenker, "Jordanian Public Keen on Hamas, but not ISIS or the Muslim Brotherhood," *Policy Analysis*, October 30, 2014, <http://www.washingtoninstitute.org/policy-analysis/view/jordanian-public-keen-on-hamas-but-not-isis-or-the-muslim-brotherhood>.
- 21 Alice Su, "It Wasn't Their War," *The Atlantic*, February 5, 2014, <http://www.theatlantic.com/international/archive/2015/02/jordan-isis-pilot-response/385199/>.
- 22 David Schenker, "Crime and Punishment in Jordan," *Policy Analysis*, February 6, 2015, <http://www.washingtoninstitute.org/policy-analysis/view/crime-and-punishment-in-jordan>.
- 23 Su, "It Wasn't Their War."
- 24 Khetam Malkawi, "Gov't's Approval Rate up," *Jordan Times*, December 23, 2014, <http://jordantimes.com/govts-approval-rate-up>; Laila Azzeh, "Gov't Approval Rate Soars to 74% – Survey," *Jordan Times*, February 28, 2015, <http://jordantimes.com/govt-approval-rate-soars-to-74-survey>.
- 25 Raed Omari, "MP Khoury Apologises over Tweets after Case against Him Dropped," *Jordan Times*, March 22, 2015, <http://jordantimes.com/mp-khoury-apologises-over-tweets-after-case-against-him-dropped>.
- 26 Mohammad al-Fadilat, "Jordanian MPs May Face Prosecution over Alleged Twitter Insults," *al-Araby*, March 12, 2015, <http://www.alaraby.co.uk/english/news/2015/3/12/jordanian-mps-may-face-prosecution-over-alleged-twitter-insults>.
- 27 "Daesh Cell Discovered in Jordan," *Albawaba*, March 17, 2015, <http://www.albawaba.com/news/breaking-daesh-cell-discovered-jordan-670274>.
- 28 Alice Su, "The Boy Named Jihad: From the Ashes of the Arab Spring to the Battlefields of Syria," *The Atlantic*, June 19, 2015, <http://www.theatlantic.com/international/archive/2015/06/jihad-jordan-syria-isis/396041/>.
- 29 Caitlin Werrell and Francesco Femia, eds., *The Arab Spring and Climate Change*, Center for American Progress, Stimson Center, and the Center

- for Climate and Security, February 2013, pp. 25, 46, 47, <https://www.americanprogress.org/issues/security/report/2013/02/28/54579/the-arab-spring-and-climate-change/>.
- 30 “Renewable Internal Freshwater Resources per Capita (cubic Meters),” World Bank, 2013, <http://data.worldbank.org/indicator/ER.H2O.INTR.PC>.
- 31 Chris White, “Understanding Water Scarcity: Definitions and Measurements,” Global Water Forum, May 7, 2012, <http://www.globalwaterforum.org/2012/05/07/understanding-water-scarcity-definitions-and-measurements/>.
- 32 Hashemite Kingdom of Jordan, Ministry of Water & Irrigation, *2012 Annual Report*, 2012, p. 57, <http://www.mwi.gov.jo/sites/en-us/Annual%20Reports/MWI%202012%20English%20Report.pdf>.
- 33 Abeer Momani, “Miyahuna- Customer Service Interview,” interview by author, July 24, 2013.
- 34 The Hashemite Kingdom of Jordan, Water Authority of Jordan / Ministry of Water and Irrigation, Performance Management Unit, *Terms of Reference & Conditions of Tender for Consulting Services for Preliminary Design, Preparation of Design – Build Tender Documents & Supervision of Works for Umm Elulul–Jerash Hofa –Ajloun Transmission Pipelines*, under “Introduction: Characteristics of Project Area.”
- 35 Werrell and Femia, eds., *The Arab Spring and Climate Change*, pp. 25, 46, 47.
- 36 Colin P. Kelley et al., “Climate Change in the Fertile Crescent and Implications of the Recent Syrian Drought,” *Proc Natl Acad Sci USA Proceedings of the National Academy of Sciences* 112, no. 11 (January 30, 2015): under «Heightened Vulnerability and the Effects of the Drought,» doi:10.1073/pnas.1421533112.
- 37 “Unemployment, Youth Total (% of Total Labor Force Ages 15-24) (modeled ILO Estimate),” World Bank, <http://data.worldbank.org/indicator/SL.UEM.1524.ZS>.
- 38 “Jordan,” U.S. Energy Information Administration (EIA), March 2014, <http://www.eia.gov/countries/country-data.cfm?fips=jo>.
- 39 “Jordan’s Central Bank Urges Sticking with IMF Reforms,” *al-Arabiya*, January 27, 2014, <http://english.alarabiya.net/en/business/economy/2014/01/27/Jordan-s-central-bank-urges-sticking-with-IMF-reforms.html>.
- 40 Raed Omari, “Gov’t, House Panel Bicker over Calculation of Electricity Company’s Deficit,” *Jordan Times*, January 19, 2015, <http://jordantimes.com/govt-house-panel-bicker-over-calculation-of-electricity-companys-deficit>.
- 41 Muhieddin Tawalbeh, *Solar Energy in Jordan Policies & Regulation*, National Center for Research and Research/Development Energy Program, <http://www.miraproject.eu/workgroups-area/workgroup.wp7/workgroup-documents-library/thematic-forum-1/2nd-emis-forum-presentations/1st-day-presentations/Solar%20Energy%20in%20Jordan%20-%20Policies%20-%20Regulation%20-%20Muhieddin%20Tawalbeh.pdf>.

- 42 Mohammad Ghazal, "Talks with Firm Handling Israeli Gas 'on Hold,'" *Jordan Times*, January 4, 2015, <http://www.jordantimes.com/news/local/talks-firm-handling-israeli-gas-hold%E2%80%99>.
- 43 Merza Noghai, "Friday March Planned against Israel Gas Deal," *Jordan Times*, March 4, 2015, <http://jordantimes.com/friday-march-planned-against-israel-gas-deal>.
- 44 Raed Omari, "House Speaker Urges Restraint as MPs Reject Projected Gas Deal with Israel," *Jordan Times*, December 16, 2014, <http://jordantimes.com/house-speaker-urges-restraint-as-mps-reject-projected-gas-deal-with-israel>.
- 45 Tawalbeh, *Solar Energy in Jordan Policies & Regulation*.
- 46 "Financial Close Reached to Build the First Utility-Scale Wind Farm in Jordan," Jordan Wind Project Company, November 27, 2014, <http://www.jordanwind.com/index.php/26-announcements/59-financial-close-reached-to-build-the-first-utility-scale-wind-farm-in-jordan>.
- 47 "First Turbine Erected at Tafila Wind Farm," Jordan Wind Project Company, January 2015, <http://www.jordanwind.com/index.php/news/first-turbine-erected-at-tafila-wind-farm>.
- 48 Tawalbeh, *Solar Energy in Jordan Policies & Regulation*.
- 49 Mohammad Ghazal, "Jordan Inks 12 Deals for Solar-run Power Plants," *Jordan Times*, March 31, 2014, <http://jordantimes.com/jordan-inks-12-deals-for-solar-run-power-plants>.
- 50 Mohammad Ghazal, "Company Granted Licence for Maan Solar-run Power Plant," *Jordan Times*, January 3, 2015, <http://jordantimes.com/company-granted-licence-for-maan-solar-run-power-plant>.
- 51 Tamsin Carlisle, "Jordan Follows Rocky Road to Oil Shale Development," *Platts McGraw Hill Financial* (blog), April 4, 2014, <http://blogs.platts.com/2014/04/04/jordan-shale-oil/>.
- 52 "Jordan's Project," Enefit, <https://www.enefit.com/jordan>.
- 53 "Flaming Rocks," *The Economist*, June 28, 2014, <http://www.economist.com/news/business/21605928-second-shale-revolution-may-be-coming-squeezing-out-yet-more-oil-flaming-rocks>.
- 54 "Russia Approves Draft Deal to Build Nuclear Plant in Jordan," *Times of Israel*, December 25, 2014, <http://www.timesofisrael.com/russia-approves-draft-deal-to-build-nuclear-plant-in-jordan/>.
- 55 Ali Ahmad, "Jordan's Bet on Nuclear Power Is Risky," *Daily Star*, February 27, 2015, <http://www.dailystar.com.lb/Opinion/Commentary/2015/February-27/288935-jordans-bet-on-nuclear-power-is-risky.ashx>.
- 56 Ahmad, "Jordan's Bet on Nuclear Power Is Risky."