CHAPTER 6

ENVIRONMENT

Environmental Damage

"If nothing changes in the coming years, more than half of Iran's provinces will have to evacuate. They'll simply become unlivable."

—THOMAS ERDBRINK IN HIS VIDEO, "THE EMPTY RIVER OF LIFE," FOR *THE NEW YORK TIMES*[369]

Water

As the eighteenth largest country in the world by area, Iran experiences a range of climates: temperatures can range from -20°C (-4°F) in the northwest to above 55°C (131°F) in

369 Thomas Erdbrink, "Video: The Empty River of Life," *The New York Times*, May 5, 2015, sec. World.

the southwest; central and southeastern regions may have less than 50 mm of rain in a year, but coastal regions may experience more than 1,600 mm of rainfall annually.[370, 371] Nevertheless, the majority of Iran is arid or semiarid.[372] Most rainfall occurs in a small section of the country, while the rest of the land (about 65 percent) receives less than 100 mm of annual rainfall—for context, deserts on average receive 250 mm of rain per year.[373, 374] Because of the natural scarcity of water in many regions, early civilizations in Iran developed methods of water management. For instance, the ancient qanat system that transferred groundwater using kilometers of underground tunnels was constructed as early as 2,500 to 3,000 years ago.[375] Designated by the UN as a Globally Important Agricultural Heritage System, it once made Iran "the most fertile area in the history of Asia."[376, 377]

Yet in the modern era, Iran's water availability has diminished. In less than fifty years, Iran has depleted around 70 percent of its groundwater supply.[378] Based on the high usage of water relative to what is available as calculated by the

370 "Largest Countries in the World by Area," Worldometer, accessed October 22, 2020.

371 Masoud Saatsaz, *A Historical Investigation on Water Resources Management in Iran*, 2019.

372 Ibid.

373 Ibid.

374 "Desert," NASA Earth Observatory (NASA Earth Observatory, October 22, 2020).

375 "Qanāt," Encyclopedia Britannica, accessed October 22, 2020.

376 UNESCO World Heritage Centre, "The Persian Qanat," UNESCO World Heritage Centre, accessed October 22, 2020.

377 Ding Gang, "Self-Sufficiency Helps Iran Counter Sanctions," Global Times, May 15, 2019.

378 Kayla Ritter, "Tehran Faces Crisis As Iran's Water Supply Runs Low," *Circle of Blue* (blog), June 6, 2018.

Criticality Ratio, Iran falls in the category of a "high water stress region."[379] The World Resources Institute similarly ranks Iran as the fourth most water-stressed country globally.[380] At current rates of depletion, 50 million Iranians are at risk of forced migration if current farming practices and water consumption continue.[381] Moreover, desertification has already led to increased soil erosion as well as changes in animal habitats and migration patterns.[382] Because of increased drought, "many species of plants have died," according to Isa Kalantari, the head of Iran's Department of Environment. "That has impacted the population of rabbits and black-tailed gazelle which graze in the grasslands. As a result, the number of predators that feed on these herbivores has sharply dropped."[383]

Deadly dust storms have been recorded to occur at higher frequencies as a result of "changes in land and water use."[384] These dust storms—a consequence of desertification—have brought high winds that cause damage to trees and power lines, as well as the suspension of dust particles in the air which, when inhaled, increase the risk of pulmonary diseases and cancer.[385] Due to instances of "severe air pollution,"

379 Saatsaz, *A Historical Investigation.*

380 Austin Bodetti, "Iran Struggles With Food Security Amid Sanctions," LobeLog, September 16, 2019.

381 Connor Dilleen, "Will Renewed US Sanctions Worsen Iran's Water Security Crisis?," The Strategist—The Australian Strategic Policy Institute (ASPI), August 7, 2018.

382 "Hamoun Wetlands: Current Situation and the Way Forward" (United Nations Development Program (UNDP), March 2014).

383 Fardine Hamidi, trans., "Iran's Zagros Mountains Face Water Shortage, Threatening Wildlife, Plants," Khayan Life, February 24, 2019.

384 Richard Angwin, "Dust Storms—a Modern Plague on Iran," Al Jazeera, June 4, 2014.

385 "Residents Abandoning Regions With Increasingly Fierce Sandstorms," Radio Farda, April 30, 2018.

schools, government offices, and businesses have closed.[386] People have already been leaving their homes in Khuzestan province in southwestern Iran because the storms have been so disruptive to their lives—in 2018, 235 days of the year were determined to have "unhealthy weather."[387] These dust storms have even reached Tehran, where school closures have become a "winter routine" due to air pollution.[388] The independent news agency Radio Farda wrote, "Though the exact cause of the increase in storms is not known, accelerated dam construction and diversion of water resources for agriculture throughout the region is thought to be the main culprit."[389]

Since the 1979 revolution, Iran has adopted the objective of being completely food self-reliant as a means of becoming less dependent on Western imports. This policy has continued throughout the Iran-Iraq war to today, as the enduring antagonism between Iran and the international community threatens its food security.[390] When American sanctions were reimposed in 2018, banking systems became "paralyzed," impeding transactions between Iran and other countries. By the end of that year, foreign food suppliers such as Cargill, Incorporated, Bunge Limited, and Olam International from the US and Singapore had suspended their exports to Iran.[391] As a comparison, Iran in 2017 had imported 1.2 million metric tons of rice, 1.3 million tons of barley, and 9.5 million

386 Angwin, "Dust Storms."

387 Radio Farda, "Residents Abandoning Regions."

388 Tom Lewis and Kaveh Madani, "End of Sanctions May Help Iran Face an Accelerating Environmental Crisis," *The Guardian*, January 20, 2016, sec. World news.

389 Radio Farda, "Residents Abandoning Regions."

390 Saatsaz, *A Historical Investigation*.

391 Saul and Hafezi, "Exclusive: Global Traders."

tons of corn.[392] Although thus far food remains relatively available (but at high prices) in Iran, the threat of not having enough food supply is real and present. Iran's objective of agricultural self-sufficiency is therefore as important as ever to build resistance to food import fluctuations. According to Mohammad Bakhshoodeh, head of the agricultural economics department at Shiraz University in 2019:

> "To keep national food security, the Iranian government focuses on self-sufficiency policies, concentrates on domestic production of food and other agricultural products, and encourages productivity enhancement of basic inputs, particularly that of water. Moreover, the government supports farmers with policies of guaranteeing purchases, expanding agricultural insurances with significant coverage, and so on."[393]

Iran's sanctions-resistance strategy might make sense in theory, but in practice, it has come at an enormous environmental cost. Geographically, the majority of Iran's land is deemed to have "unsuitable" or "very poor" soil, terrain, and precipitation for agriculture. Farming in these land categories is considered to be water-intensive, conducive to land degradation, and as much as 5.5 times more inefficient than farming in a "medium" suitability class. Yet based on the current allocation of farmland and the relatively low composition of fertile land in Iran overall, a "sizable acreage" currently occurs on land "unsuitable" or "very poor" for farming.[394] In Iran, the agriculture

392 Bodetti, "Iran Struggles With Food."

393 Ibid.

394 Mohsen B. Mesgaran et al., "Iran's Land Suitability for Agriculture," *Scientific Reports* 7, no. 1 (August 9, 2017): 7670.

industry uses over 90 percent of the country's entire water supply.[395] Thus, the country's food and agricultural policies, designed to counteract sanctions and international isolation, is highly incompatible with the country's geography.

Although much of the environmental stress is also due to rapid population growth and poor policy choices that misallocate resources in a country where water and fertile land is naturally scarce, sanctions have impeded the transfer of knowledge and technology that would reduce the agricultural reliance on water. According to a 2017 report by the Danish Agriculture and Food Council, farming machinery in Iran "are in many cases worn out, many farms have not implemented mechanization and Iranian farmers are in most cases using antiquated farming techniques."[396] Because sanctions have restricted Iran's access to new information and technology, "both the agricultural sector and the area of food production has suffered."[397] Relative to the EU, Iran's degree of agricultural mechanization is approximately five-fold lower. Because of these outdated practices and old machinery, Iran produces much lower crop yields than would otherwise be possible. In other words, the same quantity of goods requires more land and water in Iran than in countries with more updated farming techniques.[398] For instance, it takes about twice as much water to produce the same amount of wheat in Iran as in other parts of the world.[399] Yet, access to knowledge

395 Thomas Erdbrink, "Scarred Riverbeds and Dead Pistachio Trees in a Parched Iran," *The New York Times*, December 18, 2015, sec. World.

396 The Royal Danish Embassy in Tehran, "The Agriculture and Food Market in Iran" (Danish Agriculture & Food Council, March 2017), 12.

397 Ibid, 4.

398 "Iran Water Industry Counting the Cost of US Sanctions," Eghtesad Online, October 6, 2019.

399 UNDP, "Hamoun Wetlands."

and technology that could relieve the strain on Iran's water supply has been restricted as a consequence of sanctions.

Local companies that facilitate water infrastructure modernization have experienced difficulties importing equipment, parts, and raw materials.[400] Everything from modern irrigation systems, water transfer pipes, and control units, to systems for collecting and recycling wastewater is "highly required" to increase water efficiency in Iran, but is obstructed by secondary sanctions.[401]

At the 2019 International Water and Wastewater Exhibition, the sales manager for an Iranian distributor of a Taiwanese water filter manufacturing company, Nafiseh Haghighat Javan, spoke about issues facing her business. "Fluctuations in the currency market and sanctions have created many problems regarding cooperation with Easywell to the point that we decided to turn to domestic production," she said, acknowledging the financial and political risks that Taiwan faces if the country continues to export under the secondary sanctions. The ten-year collaboration between Easywell and its Iranian counterpart has been forced into a hiatus as exporting from Taiwan "is not possible at the moment."[402]

Despite needing to reduce foreign dependence, Iran "so far does not have the technology" to achieve self-sufficiency in the industry. "Truth be said, no local manufacturer can claim he/she makes all the equipment and devices inside the country," said Javan.[403] As in the cases of other goods, high-quality water treatment products "are either not accessible" or too expensive. For raw materials inside filters,

400 Erdbrink, "Scarred Riverbeds."

401 Royal Danish Embassy, "Agriculture and Food Market."

402 Eghtesad Online, "Iran Water Industry."

403 Ibid.

domestic products "regrettably... do not meet the global standards." Another sales manager that imports German and Japanese products that ensure the quality of treated wastewater spoke similarly of how sanctions impeded his business. He stated, "We cannot buy electrical parts from the US or Japan and have access only to Chinese parts. Honestly speaking, the final product is not as accurate as it should be. However, the price is more competitive."[404]

International organizations such as the World Bank have also struggled to help improve Iran's water problem. In a 2014 audit evaluating the effectiveness of World Bank projects that were aimed to reform Iran's water management practices, sanctions were cited six times as the reason for unsatisfactory outcomes.[405] The report stated, "By far the largest issue was the sanctions on trade, international flow of funds and banking that Iran experienced from the third year of the project, although at time of appraisal, the broad scope of the eventual sanctions could not be foreseen."[406] Other sanctions-related issues include "procurement disruptions" and problems with the transfer of funds through intermediary banks.[407] Interestingly, the government demonstrated its commitment by allocating $50 million to the project to sustain funding even when banking and trade sanctions had threatened project financing.[408] According to the Atlantic Council in 2019, the World Bank's Iran Page had issued a disclaimer stating that

404 Ibid.

405 Mana Mostatabi, "Sanctioning Iran's Climate," *Atlantic Council* (blog), May 1, 2019.

406 ICR Independent Evaluation Group, "IEG: ICR Review" (World Bank Group, April 29, 2014).

407 Ibid.

408 Ibid.

the bank, in compliance with sanctions, "has not approved any new lending to Iran since 2005."[409]

With the domestic resources and infrastructures available, Iran has had to rely on poorly built dams and reservoirs, rainfall, or illegal wells for irrigation. Many of the existing dams are not operating at full capacity due to insufficient rain.[410] While the government has used cloud seeding—adding chemicals to the air to artificially increase precipitation—the environmental consequences of this procedure are unclear, and it is doubtful that the approach would have any lasting consequences to Iran's drought problem.[411, 412] Low water supply and high demand have resulted in farmers obtaining water through illegal means, such as digging wells or installing pumps to extract water.[413]

Given Iran's dire environmental and economic outlook, farmers look to short-term gains from "stealing" as much water as they can and "selling up" as it runs out.[414] However, these illegal wells often come from sources that the government has tried to set aside for sustainability purposes, and many have come up dry even below 600 feet.[415, 416] There have also been desalination efforts, but pumping desalinated water to higher altitudes is energy-intensive—so much so that transporting enough water for farmers in central Iran

409 Mostatabi, "Sanctioning Iran's Climate."

410 Tamer Badawi, "Iran's Water Problem," Carnegie Endowment for International Peace, December 11, 2018.

411 Ibid.

412 Jessica Brown, "Cloud Seeding: Should We Be Playing God and Controlling the Weather?," *The Independent*, January 17, 2018.

413 Badawi, "Iran's Water Problem."

414 Lewis and Madani, "End of Sanctions."

415 Badawi, "Iran's Water Problem."

416 Erdbrink, "Scarred Riverbeds."

to grow 10 percent of its wheat would take up 10 percent of the entire country's natural gas consumption.[417] According to Mori during our conversation, the desalination technology that continues to function on some of Iran's southern Islands was acquired from Israel prior to the 1979 revolution.

From the combination of legal and illegal water extraction, Iran uses as much as 3.8 billion cubic meters of water more than can be replenished and has one of the fastest groundwater depletion rates in the world.[418, 419] Those who drink water from wells often find it contaminated by salt and other residues, and many have developed kidney stones as a result. Amin, whose family owns a dried-up pistachio grove in southern Iran, said, "The irony is... that I have to drink even more water to reduce the pain."[420]

The JCPOA provided a glimmer of hope for Iran's water crisis. In the wake of eased sanctions, the Iranian government "quickly moved to attract investment and technical collaboration in its water infrastructure, utilities, and agricultural sectors," and foreign nations such as Denmark, Germany, Sweden, France, and Italy offered their support.[421, 422, 423]

While lifting sanctions would not "automatically reverse" the environmental situation in Iran, access to foreign direct investment, technology, and expertise would have a

417 Badawi, "Iran's Water Problem."

418 Bozorgmehr Sharafedin, "Iran's Thirsty Energy Industry Runs up against Water Shortage," *Reuters*, October 29, 2019.

419 Somini Sengupta, "Warming, Water Crisis, Then Unrest: How Iran Fits an Alarming Pattern," *The New York Times*, January 18, 2018, sec. Climate.

420 Erdbrink, "Scarred Riverbeds."

421 Lewis and Madani, "End of Sanctions."

422 Lyse Doucet, "Nuclear Deal Could Give Iran Technologies to Cut Pollution," *BBC News*, November 30, 2015, sec. Asia.

423 David Michel, "Iran's Impending Water Crisis," 2017.

replenishing effect in the long run for Iran's "ailing industries." Moreover, stimulating the Iranian economy would free up government funds to combat the water crisis and other national priorities.[424]

However, these aspirations have been short-lived. "The doubling down of the Trump administration on the question of regime change in Iran, combined with the re-introduction of punitive sanctions against Iran, dramatically diminishes the prospects for any serious water reform in Iran," wrote Connor Dilleen for the Australian Strategic Policy Institute, "The re-imposition of broad-based sanctions will also likely limit Iran's ability to leverage external technical expertise and technologies relevant to best practice in water conservation, and potentially even its capacity to meet a growing shortfall in food supply."[425]

Biodiversity Loss

Wildlife survival is also at stake. According to the Department of Environment, of the 1,200 species of animals in Iran, about 15 to 20 percent are "threatened with extinction." Moreover, around twelve to sixty animals in the country are "critically endangered" as of 2019.[426] For the Asiatic cheetah—which can now only be found in Iran—about fifty are

424 Aryn Baker, "A Side Effect of Iranian Sanctions: Tehran's Bad Air," *Time*, July 7, 2014.

425 Dilleen, "Will Renewed US Sanction."

426 "150 Animals in Danger of Extinction in Iran," Tehran Times, April 13, 2019.

estimated to be remaining in the world. Approximately 165 types of plants in Iran are also threatened.[427]

Shirin Hakim, a PhD scholar studying the environmental impacts of sanctions wrote, "When a country is battling sanctions, often bare necessities such as the supply of food, medical care and sustaining the local economy become priorities, and issues such as the environment lose significance." She noted that these more pressing domestic issues have led to the decline of the government's environmental budget: "Operating with fewer economic resources makes it increasingly difficult for the government to not only hire, but also provide employees with necessary equipment and monitoring technologies to preserve biodiversity."[428]

Not only have sanctions indirectly affected the government's environmental protection capacity, but they have also directly thwarted the conservation process. The Global Environmental Facility (GEF), a World Bank subsidiary, had granted Iran $7.6 million towards multiyear projects to protect biodiversity—but funds were blocked by US sanctions in 2014.[429] Travel barriers and other sanctions-related problems also likely prevent the exchange of information between foreign conservation experts and those living in Iran. The Society for Worldwide Interbank Financial Telecommunications (SWIFT), which processes funds electronically and is used for most international transfers, disconnected Iranian banks from the system in 2018. Local scientists have consequently struggled

427 Walker, "Hitting Nature Where It Hurts: Iran Feels the Pernicious Effects of US Sanctions on Biodiversity Conservation," Equal Times, February 27, 2019.

428 Syed Zafar Mehdi, "US Sanctions Cause Environmental Crisis in Iran," Anadolu Agency (AA), December 20, 2019.

429 Mehdi, "US Sanctions."

to purchase basic equipment to monitor wildlife—an essential step in the conservation process, having to instead rely on volunteer passengers to carry camera equipment or radio tracking collars into the country.[430, 431] As eight wrote in a letter to the academic journal, *Science*, "Sanctions reduce opportunities to transfer international expertise and skills and erect barriers to international financial support, which together limit the capacity of conservationists within sanctioned countries to enact effective conservation interventions."[432]

Oil

Beyond water and wildlife-related environmental issues in Iran, a direct effect of US sanctions has been the domestic usage of oil by-products and production of gasoline. "Sanctions significantly contributed to pollution, and particularly the kinds of pollution that are damaging to health," said economist and sanctions expert, Rocky Ansari.[433] While Iran has one of the world's largest proven petroleum reserves, it typically exported most of its petroleum and depended on imports for more refined fuel types such as gasoline.[434] However, the recent decade of sanctions has explicitly restricted gasoline imports—as well as equipment or services that "would help Iran make or import gasoline."[435] In order to

430 Walker, "Hitting Nature Where It Hurts."

431 Erdbrink, "Video: The Empty River of Life."

432 L. Khalatbari et al., "Sanctioning to Extinction in Iran," *Science* 362, no. 6420 (December 14, 2018): 1255-1255.

433 Baker, "A Side Effect."

434 Ibid.

435 Katzman, "Iran Sanctions."

supply its cars, trucks, and motorcycles with fuel, Iran has resorted to transforming its petrochemical plants—which usually produce plastics—into refineries.[436, 437] This "expensive and inefficient process" produces low-quality gasoline "choked with pollutants."[438]

In addition to the issue of oil refineries themselves, there is also the issue of what they produce. To increase the domestic supply of gasoline, benzenes, and methyl tertiary-butyl ether (MTBE) are added into the mix—additives that are banned in most Western countries due to health concerns.[439]

Moreover, one of the by-products of Iran's relatively primitive oil refineries is mazut, a "low quality fuel oil with an obnoxious smell." In the US and Europe, this viscous, black substance can be further processed into diesel. Yet in Iran, the refineries—most of which were built during the pre-revolutionary era—not only lack the capacity to break down this material, but also produce a higher ratio of mazut relative to more modern processes. Using these antiquated refineries, around 24 percent of crude oil is turned into mazut. "The level of sulfur density in mazut produced in Iran is nearly 3.5 percent, which is seven times more than the international standard for vessels on high seas, and its usage is strictly banned in urban areas, specifically in the cities like Tehran that are struggling with air pollution," reported Radio Farda on the toxicity of this substance.[440]

436 Mostatabi, "Sanctioning Iran's Climate."

437 Vida Balikhani, "Poor Quality Gasoline Deadly for Iranians," *Atlantic Council* (blog), February 16, 2017.

438 Baker, "A Side Effect."

439 Balikhani, "Poor Quality Gasoline."

440 "Harmful Oil Bi-Product Used In Iranian Cities, Polluting The Air," Radio Farda, January 19, 2020.

Thus, unfortunately because of oil sanctions, major environmental problems are created in Iran. Not only does the usage of old petrochemical factories to refine oil cause dangerous air pollution, but the country has also been barred from exporting mazut—meaning that Iran has no choice but to burn the substance domestically in its electricity plants. According to Isa Kalantari, the Department of Environment chief, regretfully, "Iran is caught in a vicious circle of air pollution, without knowing how to find a way out." In under a year, by January 2020, nearly 99 million cubic feet of mazut had been fed to Iranian power plants. "Having clean air has become an impossible dream for Iranians," he said.[441]

When sanctions were temporarily lifted, the change in visibility was dramatic. "Now that hardly any petrol from petrochemical factories is being used, the pollution has reduced, and already people can breathe better air," said Ansari during this period of environmental relief. The snow mountains surrounding the capital city were once again visible.[442]

Companies like Daelim Industrial Company and Hyundai Engineering from South Korea agreed in late 2016 to early 2017 to help various Iranian oil refining companies to update their oil refineries, with each deal worth billions of US dollars.[443] Yet by 2018 when sanctions were reimposed, both projects were canceled.[444, 445]

441 Ibid.

442 Baker, "A Side Effect."

443 "Daelim Revokes W2tln Deal with Iranian Oil Company in Wake," The Korea Herald, June 1, 2018.

444 Ibid.

445 Reuters Staff, "South Korea's Hyundai E&C Cancels $521 Million Petrochemicals Deal, Cites Iran Financing Failure," *Reuters*, October 29, 2018.

Iran's Environmental Future

Iran, as evidenced by the Supreme Leader's directives, is aware of and aims to mitigate climate change as well as environmental issues such as desertification, pollution, and drought. In a speech just before the 2015 Paris Climate Change Conference (COP 21), Khamenei stressed the importance of expanding a "green economy" that increased dependence on renewable energy sources and improved waste management. Moreover, Khamenei supported increasing "environmental diplomacy" and "bilateral, multilateral, regional and international partnerships and targeted cooperation in the environmental field."[446]

At the Paris Climate Conference in 2015, Iran pledged to reduce emissions by 12 percent, devote $5 billion towards conservation, and cut greenhouse gas emissions by 4 percent so long as sanctions were not reimposed.[447] The country remained committed to environmental issues in 2017—when it proposed to add the water-related issues to the agenda of the next Climate Conference (COP 24). Kaveh Madani, deputy head of the Department of Environment on Research and Education at the COP 23 conference, said "Four decades of international and extraterritorial sanctions have had a multiplier effect on the adverse impacts of climate change on Iran, resulting in environmental degradation. The imposition of unilateral coercive economic measures contrary to the international law by some developed countries [...] decrease the countries' ability to cope with the adverse impacts of climate change and violate the rights of many people."[448]

During the period of sanctions relief, a "flurry" of foreign interest presented itself to Iran. Based on the country's natural landscape, half of its domestic energy needs can be satisfied by solar and wind energy.[449] Renewable energy companies like the UK's Quercus, Germany's Siemens, and Norway's Saga Energy initiated multimillion-dollar projects with Iran.[450, 451] As a report on behalf of the German Environment Agency recalls about this period, "within two months of JCPOA signing, four contracts for solar projects were signed for approximately 1,150 MW (for context, Iran's solar capacity grew from 53 MW in 2005 to 67 MW by 2011). Furthermore, Danish multinational Vestas committed to investing $100 million in Iranian wind infrastructure, and a German venture pledged to develop a 48 MW wind farm. Finally, $75 million investment was pledged for developing a waste-to-energy plant."[452]

But once again, when the sanctions snapback occurred, Quercus announced its decision to "cease all activities" in Iran, including its $570 million plan to construct a solar power plant. Siemens refused to accept new orders from Iran, and Saga Energy's solar energy construction project was delayed due to difficulties in receiving funding.[453, 454]

446 Arash Karami, "Khamenei Says Iran Must Go Green," Al-Monitor, November 18, 2015.

447 Mostatabi, "Sanctioning Iran's Climate."

448 "Iran Proposes Inclusion of Water-Related Issues in COP 24," Tehran Times, November 22, 2017.

449 Mostatabi, "Sanctioning Iran's Climate."

450 Ibid.

451 María Yetano Roche, Cordelia Paetz, and Carmen Dienst, "Implementation of Nationally Determined Contributions—Islamic Republic of Iran," *Umwelt Bundesamt*, 2018, 42.

452 Ibid, 38.

453 Mostatabi, "Sanctioning Iran's Climate."

454 Roche, Paetz, and Dienst, "Implementation."

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Sanctions imposed on Iran are supposed to reduce its chances of acquiring a nuclear weapon, curb its regional activities, and condemn human rights abuses. But what has happened as a result is an environmental disaster, which not only directly affects the human rights of Iranian people but also has devastating and long-term consequences to the entire global population. Disease from polluted air, forced migration due to poor environmental conditions and water scarcity, and food insecurity are only some of the problems facing Iranian people today. The toxic chemicals from its domestic oil refineries are released into the atmosphere—which is shared by Americans and Iranians alike. Preventing Iran from updating its energy production systems is, in the long-run, detrimental to everyone's ability to enjoy clean air. The Communication Director at the National Iranian American Council (NIAC) writes, "To support the Iranian people means empowering those dedicated to stewarding Iran's resources—not weaponizing access to food, land, and water."[455]

455 Mostatabi, "Sanctioning Iran's Climate."