Because of the Droughts

The idea that climate change triggered the Syrian uprising is a persistent and dangerous myth. What really happened?

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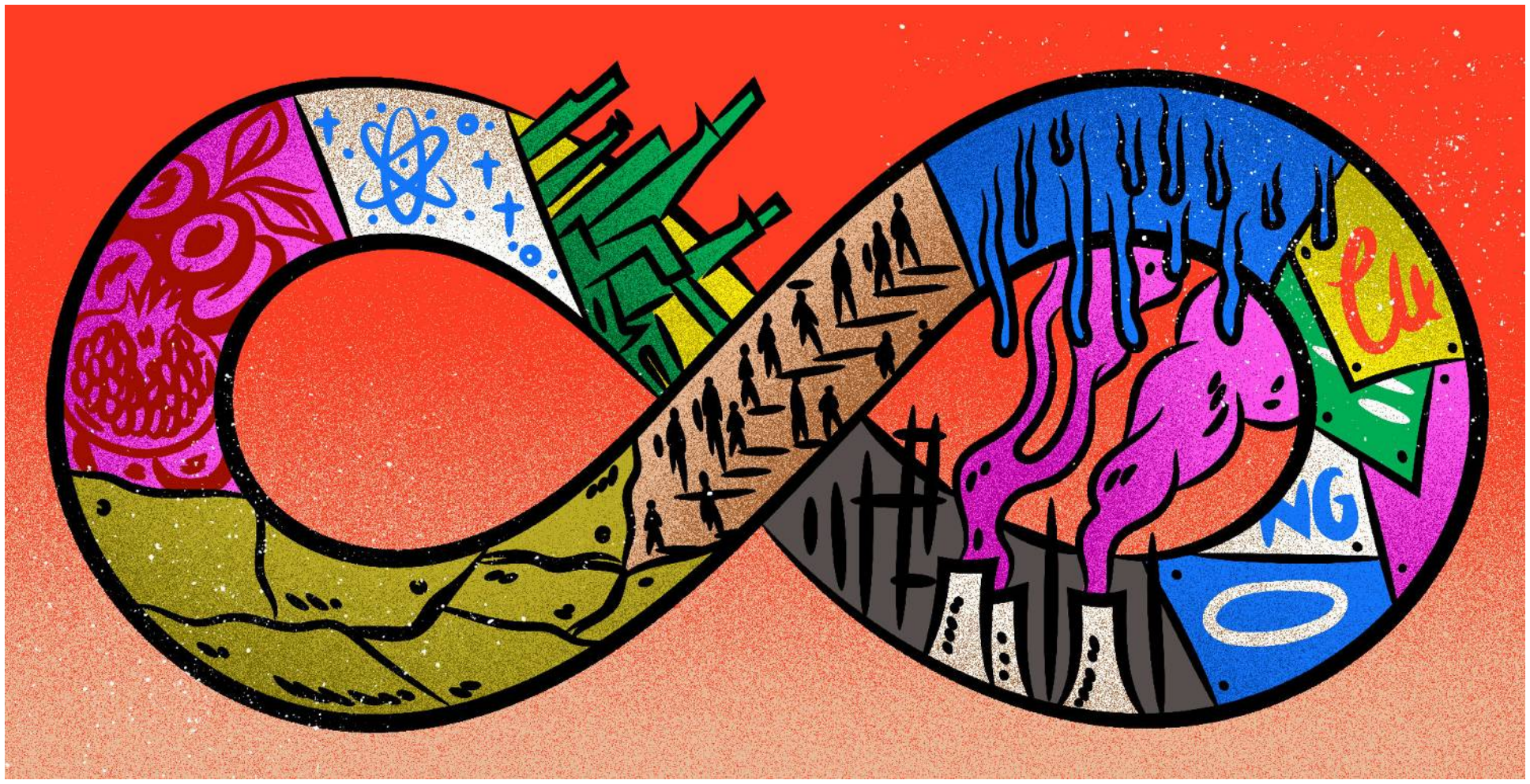


Art by Osheen Siva

Essay

Protest

"I just arrived here." "Because of the droughts?" asked the inspector. "What?" "You came because of the droughts?" She considered the question. It had rained last year. They had gone hungry for other reasons: the landowners, the price of sugar. There is a trap, she thought, but said, "Yes, because of the droughts."

—Daniel Mason, *A Far Country*

We Love You

It's July 2007—a scorching summer at the end of what is, for now, the hottest decade on record—and the road to Damascus is plastered with gigantic ads. Enormous vinyl banners flap from buildings advertising Samsung, Aiwa, Syriatel, Panasonic. But the most ubiquitous brand is the president, Bashar al-Assad. His faintly cross-eyed face gazes down at you from billboards and posters on every building. Below him floats the word minhebbak: we love you. Bashar was just reelected by a margin of 97.6 percent; not surprising, since he ran unopposed.

In a few years, this road will be one long checkpoint. Most of the people in this story will be in exile. Almost every year will be the hottest on record. But for now, I'm driving to Syria with my soon-to-be ex-husband, on a three-day trip to see a friend, the Syrian writer and journalist Lina Sinjab, and we're on our way to a world that will soon be gone.

That evening, Lina takes us to a restaurant in the old city. We sit outside on a rooftop terrace under one of the minarets of the eighth-century Umayyad Mosque, which seems to float just above us, timeless, like a palace in the night air. The moon sinks into a thicket of satellite dishes. A hot wind carries the sugary smell of strawberry-flavored *argileh* smoke. Umm Kulthum's unearthly voice warbles at us from the 1950s, buoyed by the roars of long-gone crowds. At the next tables, Italians chatter and chain smoke. Scandinavians bark with harsh laughter. And wealthy Syrian women with expensively casual coiffures gossip and sip cool drinks out of hand-painted glass tumblers.

In the north, a drought is just beginning to stretch its wrinkled fingers into the countryside. People are leaving the lands their families have farmed for generations. But here in the new Damascus, air-conditioned luxury stores, boutique hotels, and trendy restaurants are opening every week. Syria will get seven million tourists in 2007, per the *Wall Street Journal*—almost one tourist for every three Syrians. Potential investors are pouring in from Europe and the Gulf. The streets are choked with oil-black luxury SUVs bearing Saudi and Qatari plates.

Assad is doing what Western pundits and policymakers have been urging him to do for years. He is privatizing, liberalizing, and encouraging foreign investment. He is divesting from the public sector, and as a result, Syria pundit Andrew Tabler notes approvingly in *The New York Times*, the private sector is "blooming." Syria's economy is "creaking open" to the West. The IMF projects that non-oil economic growth will hit a record seven percent. "Assad is relaxing state controls on the once-Socialist economy," *Condé Nast Traveler* will gush in a few years. "The arts seem to be opening up, at least a crack, and the Old City is turning into something of a party town."

But not everyone is invited to the party. The vibrant private sector may be blooming for wealthy investors and foreign tourists, "but it's not for Syrians," Lina says. "It's not helping Syrians at all."

At the state-run supermarkets that ordinary people rely on for subsidized sugar, flour, and rice, the shelves are bare more often than not. Electricity comes and goes as it pleases; the millions of tourists are straining the country's already weak infrastructure. Villages are dark at night. Kerosene lamps flicker in the windows.

Driving to the countryside feels like traveling to the 19th century.

Across from the palatial new Four Seasons Hotel, which opened to much ballyhoo in 2005, Lina points to an empty concrete canal. This dry ditch was once the Barada River, the Biblical waterway the prideful Naaman boasted was "better than all the waters of Israel." Today there isn't even a trickle. The canal is choked with trash.

Cities are made of water. The Romans built massive aqueducts that brought the Barada's waters into every house in the city. They fed the city by irrigating the Ghouta, the ring of agricultural land around Damascus, full of apricot, olive, walnut, and fig trees. In the eighth century, the Umayyads built their mosque on the site of an Iron Age temple to the Canaanite god of thunderstorms and rain. Without the water and the waterworks, none of it—the Four Seasons, the mosque, this ancient city itself—would ever have existed.

"Look what they've done to it," says Lina. Her face is twisted with a pain that I will think of years later, when I first learn the word solastalgia: the shipwrecked sorrow that we feel when environmental changes destroy the natural worlds of our homes. "It's gone."

So here we have a murder mystery. Who killed the river? What does the Barada tell us today, when so many of the world's great rivers—the Po, the Yangtze, the Colorado, the Indus—are disappearing too? The story of Syria is a warning to the rest of the world. But of what?

Influx

Ask someone from the West about Syria, and they will think of war, violence, and the Islamic State. Most Westerners see Syria through a war-on-terror-colored filter of refugees and revolution and bearded men with guns.

But for Western pundits, journalists, and policymakers, Syria has become the symbol of yet another existential threat: climate change. To the class of people that decides why things happen, the Syrian revolution and its brutal suppression, which spiraled into a bloody conflict, was a harbinger of a Hobbesian world to come. In this version of history, Syria was a "climate conflict" in which a drought made worse by climate change led to civil war and a wave of climate refugees who destabilized Western countries.

"Beginning in 2011, about one million Syrian refugees were unleashed on Europe by a civil war inflamed by climate change and drought," writes the climate pundit David Wallace-Wells, in his bestselling 2019 book, *The Uninhabitable Earth*. "In a very real sense, much of the 'populist moment' the entire West is passing through now is the result of panic produced by the shock of those migrants."

In this narrative, the words deployed to describe Syrian people are always of something nonhuman (consider that word *unleashed*). They are a crisis. They are water: a wave, a surge, a "river of refugees." They flood, they flow, they infiltrate, they inundate, they ripple. Above all, they are an influx: from the Latin word *influxus*, "a flowing in," a word of rivers, air, and light, as in the mouth of a stream flowing into a river or the sea (and also the origin of influence and influenza, which we used to believe was caused by the *influence* of the stars streaming down).

There's often a parenthetical disclaimer, an ass-covering nod to the fact that migration has many causes and it's all very complex. But climate change is always the catalyst. It is the trigger. The fuse. It is the "threat multiplier," the "scary hidden stressor," the spark that ignited a "volatile mix of underlying causes." It inflames. If the migrants are water, then climate change is all fire, heat, explosives and military jargon.

Without climate change, goes this narrative, Syria would not have had the war, the Islamic State, or the resulting influx of climate migrants. And without this threat multiplier, these climate migrants would not have caused a crisis that destabilized Europe and the entire Western world.

These Fucking Dictators

Ask someone from Syria what they think of the idea that climate change triggered the Syrian uprising, and you will probably hear an exasperated sigh. Followed by a deep breath as the person tries to come up with a diplomatic answer. Or not.

"It exonerates these fucking dictators!" shouts Mahmoud Nowara, a Syrian-Palestinian author and journalist who was jailed by the Syrian government in one of its many crackdowns on political dissent. "And it lets the West off the hook too. It's an excuse for the indifference of the West."

Ever since 2013, when this theory first appeared, I've been asking Syrians and other experts what they think of it. From tenured academic economists and political scientists to displaced Syrian farmers, cooks, and teachers, everyone I've spoken to hates the idea.

"This narrative is very successful in popular culture, because it draws attention," says Marwa Daoudy, a Syrian political scientist and associate professor at Georgetown University in Washington, DC. "But for the people in the country and in the region, this is deeply offensive, and also not accurate."

Daoudy was so troubled by the Syria-as-climate-conflict narrative that she wrote an award-winning book to refute it. In *The Origins of the Syrian Conflict: Climate Change and Human Security*, which came out in 2020, she designs a new framework for looking at crises with multiple, overlapping causes and effects—not just in Syria, but anywhere. Her model for analyzing the different elements of a crisis makes it a useful handbook for any catastrophe in this age of catastrophes, be it climate, coronavirus, or the ones we haven't discovered yet.

Daoudy doesn't blame climate scientists for being attracted to the climate conflict narrative. "I think there was a valid intention behind it," she says. They wanted to draw attention to climate change. "When you're alarmist, you get action. You can reach a wider audience by having this catchy headline: 'Climate conflict, look at the wave of migration, look at the conflict in Darfur, in Syria.'"

Darfur is the reason many experts on international migration and climate change have been skeptical of the Syria-as-climate-conflict theory from the beginning. The conventional wisdom on Darfur was also that it was a "climate conflict"—until scientists and economists established that weather conditions and crops had actually improved in the years before the conflict. Yet even though scholars disproved it years ago, the Darfur-as-climate-conflict myth persists in the media to this day.

Today, scholars on Syria, migration, and climate change have also thoroughly debunked the notion that Syria is a climate conflict. And yet, in our post-fact world, it lives on as gospel to the agenda-setting class of Western journalists, policymakers, and politicians. News outlets and their fact-checking watchdogs accept it without question. It determines multi-million-dollar funding and policy decisions, dictating everything from presidential remarks to infotainment,

documentaries, and even cartoons. It unites the anticapitalist left and the neoconservative right: Bernie Sanders, Prince Charles, Barack Obama, Naomi Klein, Thomas Friedman, *Mother Jones*, *The American Conservative*, and the government of Syrian President Bashar al-Assad—they all agree.

But if climate change didn't trigger the Syrian uprising, what did? To answer that question, we have to go back to a time when rivers ruled us, instead of the other way around.

The Rebel River

Before the war, before European powers drew the borders of the Syrian nation-state—in fact, long before the idea of the modern nation-state even existed—there were the norias of Nahr al-Aasi, the Rebel River, also known as the Orontes of the Bible.

The norias were giant wooden wheels with a series of little wooden boxes on the outside rim. The bottom of each wheel dipped into the river. The force of the water made the wheel turn, or revolve (the origin of our modern word revolution). As the wheel revolved, the little boxes scooped up water at the bottom, when they were in the river, and dumped it into giant aqueducts at the top. The aqueducts took the water throughout the town and surrounding countryside to irrigate gardens and farms.

The wheels date back to the Middle Ages, but the design goes back much earlier, to at least the third century CE, if not before. Individual people owned the wheels, but the entire community shared the water collectively. The norias are just one of many ancient water-sharing systems that form the basis of human agriculture, and what we call civilization—leading eventually, but perhaps not inevitably, to nation-states and borders and wars.

Spin the wheel several million times, until you get to World War I. After the war, the newly formed League of Nations grants France the mandate over the state of Syria, carved out of the old Ottoman Empire. A few million more revolutions, and in 1946 the nation gains independence. In the next 24 years, it staggers through no less than six coups. In November 1970, an air force general named Hafez al-Assad seizes power. He rules the country for the next three decades. His son, Bashar al-Assad, rules it to this day.

In the late 1970s, Syria's Muslim Brotherhood launches an uprising against Assad's Baath Party. The Brotherhood's campaign of suicide bombings and assassinations kill several hundred Baath Party officials, military officers, and civil servants. The government responds with torture, killings, and commando assaults on cities like Aleppo, where Brotherhood support is high. They kill thousands of people.

In February 1982, the Brotherhood seizes control of Hama, where the norias of Nahr al-Aasi still churn the river. Hafez al-Assad sends his brother Rifaat to seal off the city and crush the uprising with a three-week military assault. The military massacres between 10,000 and 30,000 people; to this day, no one knows exactly how many. Most of the people they massacre are civilians.

"It took three weeks," said one survivor to a reporter from National Public Radio. "We stayed in school overnight because we couldn't walk back home. We walked over dead bodies."

Hafez's son Bashar, a gangling youth, is 16 years old.

The Lentil Revolution

It's October 21, 1982. The Brotherhood uprising has been crushed. Now it's time to build the future. Just six months after its military massacres Hama, the Syrian government unveils a plan for a gleaming new $30 million scientific research complex in the countryside south of Aleppo. At the opening ceremony, the governor of Aleppo presents a plaque of the project's patron and host: Syrian president Hafez al-Assad.

The new facility is for the International Center for Agricultural Research in the Dry Areas, or ICARDA, a nonprofit organization that conducts scientific agricultural research in dry areas spanning 50 countries, from Morocco to Bangladesh. The organization's goal is "to improve the agricultural production and thus the economic and social wellbeing of people who live in the ICARDA region."

This is the zenith of the Green Revolution. In the mid-20th century, an agronomist named Norman Borlaug had figured out how to increase crop yields dramatically. Crop science and biotechnology make such staggering advances in growing cereals that the world's agricultural output doubles over 30 years. Looming food crises in Asia, Africa, and the Americas are averted. The Green Revolution's true believers declare—and still do to this day—that they will end hunger forever by producing ever more food.

Since the 1960s, a group of Middle Eastern governments has been collaborating with the Ford Foundation on an ambitious dream: to take the Green Revolution's miracles in wheat and rice and translate them to the Middle East's staple crops of wheat, barley, lentils, fava beans, and chickpeas.

Everyone funds this new center's operations. The United States Agency for International Development (USAID) and the World Bank each kick in about $3.7 million. The Organization of Petroleum Exporting Countries (OPEC) donates $3.165 million just for the buildings. Various foundations and world governments—Germany, Canada, the UK, Italy, Australia—sign on.

The Syrian government is also one of ICARDA's longstanding donors, and will be throughout the next 40 years. But their biggest gift is the land itself, 948 hectares outside Aleppo. Syria's state-owned construction company, Milihouse, builds a state-of the-art complex, with laboratories, lecture rooms, an auditorium, and a library. There's a computer center, a printing shop, and an international baccalaureate school, the only one in Syria, where the children of Aleppine elites go to class with the sons and daughters of American scientists and their colleagues from all over the world.

The Arab governments and their Western partners dream of an "Arab 'agricultural supermarket'" that will convert oil money into food. Syria will be the breadbasket. The complex outside Aleppo will be the laboratory of that dream. "We are an insurance policy," ICARDA director Dr. Harry S. Darling says in 1978, "against food running short in the Middle East."

The Population Bomb

In 1968, an entomologist Paul Ehrlich wrote a book called *The Population Bomb*. It opens with a "hellish" scene of "one stinking hot night in Delhi," when he and his family find themselves driving through "a crowded slum area" where "the streets seemed alive with people." Some might think streets being alive with people is a good thing. But not Ehrlich: "People, people, people, people," he writes, ominously, in case you missed the message that there are too many people.

"The battle to feed all of humanity is over," wrote Ehrlich. "In the 1970s and 1980s hundreds of millions of people will starve to death in spite of any crash programs embarked upon now." Unless humans stopped breeding, he predicted, hundreds of millions more would starve, and "mankind will breed itself into oblivion."

This idea that our world has too many mouths to feed is not new. It goes back to 1798, when Thomas Malthus published his "Essay on the Principle of Population." Nine years after the French Revolution, when high bread prices and other grievances ended up toppling the monarchy, Malthus argued that famines were nature's way of correcting the balance when the planet's population gets too big for its food supply. Famines are inevitable, according to this philosophy, which we now call Malthusian, when the earth's population exceeds its ability to produce food. And if people go hungry or die, in a Malthusian world, that is part of a sad but inevitable natural process that will restore some planetary balance. To end hunger, then, it is tragic but ultimately necessary that some of those excess people must die. When Ebenezer Scrooge says poor people had better die, "and decrease the surplus population," that's Charles Dickens brutally subtweeting Malthus.

The problem, then—the other, unstated corollary to Malthusianism—is not only that there's too many people. The problem is that there's too many of the *wrong* people. Perhaps it's no coincidence that a Malthusian obsession with hunger and overpopulation became the existential environmental threat in the 1960s and 1970s, when people across the world are rising up en masse to demand decolonization, self-determination and basic human rights.

That mass starvation never came to pass, for many reasons, one of them being Norman Borlaug and his Green Revolution. When Borlaug won the Nobel Peace Prize in 1970, just two years after *The Population Bomb* came out, his acceptance speech was a Malthusian fever dream. "Most people still fail to comprehend the magnitude and menace of the 'Population Monster,'" Borlaug said. If we ignore the tension between population growth and food supply, he continued, the result will be "worldwide disorders and social chaos, for it is a fundamental biological law that when the life of living organisms is threatened by shortage of food they tend to swarm and use violence to obtain their means of sustenance."

All the Palaces in the World

In 1980, Syrian President Hafez al-Assad gives a speech and declares himself *a peasant and the son of a peasant*. "To lie amidst the spikes of grain or on the threshing floor," he says, "is, in my eyes, worth all the palaces in the world."

Syria becomes one of the Green Revolution's biggest success stories. Borlaug's wizardry with seeds makes it not just possible but cheap to produce "strategic crops" in the country like cotton, sugar beets and wheat. And for the next 30 years, with only a few exceptions, Syria is self-sufficient in wheat.

Agriculture is central to Assad's apparatus of state power. Domestically, controlling food production is an excellent way to control peasants. Geostrategically, it's invaluable, too: instead of becoming a client state of the US or the Soviet Union, and depending on them for cheap wheat, Assad plays them off each other with the skill of a master.

ICARDA is Assad's secret weapon. The laboratory outside of Aleppo conducts its wheat research jointly with Syria's government-run agriculture program. Together they develop improved strains of wheat that increase crop yields dramatically. Between 1977 and 2008, the Syrian government's partnership with ICARDA produces over 80 improved strains of wheat. According to ICARDA's own reports, those improvements account for about 90 percent of all the wheat planted in Syria.

By 2008, wheat production has almost quadrupled, from about 1.2 million tonnes to 4.8 million tonnes, making Syria a net exporter of wheat—almost unheard of in a region where most countries have been importing for years.

This increased productivity in wheat nets the Syrian government over $350 million a year, as ICARDA's general director boasts in a conference report called *Sustainable Development in the Dry Lands: Meeting the Challenge of Global Climate Change*. The report is published in December 2010.

That month, a policewoman confiscates the stock of a struggling fruit and vegetable peddler named Tarek el-Tayeb Mohamed Bouazizi in Sidi Bouzid, Tunisia (a country that, in 2010, has one of the highest per capita wheat consumption rates in the world).

Bouazizi sets himself on fire to protest police harassment and economic injustice. He dies three weeks later. But the Arab revolutions are born. Protesters in Egypt, Yemen, Tunisia, and elsewhere wave baguettes and loaves of Arabic flatbread and chant "bread, freedom, and social justice." Bouazizi inspires uprisings against undemocratic governments across the Middle East and even the world.

I Will Drink It Myself

But Assad's stunning success in agriculture comes at a cost. All of Syria will pay the price, in a currency more valuable than all the palaces in the world: water. For years, hydrologists—including some of ICARDA's own scientists—have been predicting that Syria's intensive "mining" of groundwater for agriculture will lead to severe water shortages. They are correct.

To grow his "strategic crops" like wheat, cotton, sugar beets, barley, Hafez al-Assad builds gigantic dams that flooded entire villages. He creates vast reservoirs to irrigate these lucrative but water-intensive crops. During the 1980s and 1990s alone, Syria's production of wheat more than doubles—and so does the number of wells that suck the country's aquifers dry. By 2010, the number of wells will have more than quadrupled, from about 50,000 in 1980 to 230,000.

In Syria, the traditional bedouin grazing system, hima (Arabic for *protected*), has conserved water and maintained the dryland steppes for centuries. But now the state and its international NGO partners begins to herd bedouins into fixed settlements built around more wells, often on the outskirts of cities. This is done in the name of development and environmental conservation. But, as the Syrian scholar Haian Dukhan points out, it also helps to control rural populations.

In the mid-1990s, the Barada River begins to change. The Biblical river that fed Damascus for millennia becomes dirty, filled with sewage, and on some days, simply disappears. "It was really despair," says Muhammad Fares (a pseudonym), a researcher and journalist who grew up in the Barada River Valley. "The valley became very sad. You could see it in the dried-up old trees, less butterflies and birds, and less water."

By the end of the decade, the ancient river is dying. Wells are running dry. Centuries-old orchards are dying too. The people who live on the banks of a once-great river have to buy water from tankers.

Fares remembers how a delegation of people from the area go to the Prime Minister's office. An old man named Abu Ali stands in front of the office holding up a bottle of muddy water that he'd filled from the tap at his house in his village. "If you can drink this," he shouts, "I will drink it myself!"

The Prime Minister promises them he will do something. But it's too late: the water is gone.

If the government of Syria had invested in expensive but water-saving drip irrigation systems at this point (or any other), and made them widely available to farmers, say agronomists and hydrologists, things might have turned out differently. Instead, the government invests in the cheaper infrastructure of magical thinking and propaganda. In 1999, during a drought so severe that farmers have to use raw sewage to irrigate their crops, Hafez al-Assad begins to popularize the ritual of calling nationwide mass gatherings to pray for rain.

Exiles

Hafez al-Assad dies in June 2000. His son Bashar takes power. Right away, he passes a decree privatizing Syria's collective farms. It is the beginning of Assad's trademark approach, the first of many economic "reforms" that will define this era: neoliberal free-market austerity coupled with old-fashioned state repression.

A lot of Syrians, even the ones who hate Hafez al-Assad, will tell you that in his day people from the countryside had a chance of social mobility. But Bashar sees farmers as backward, a hindrance to the modern urban image he is trying to project to the European Union and other foreign investors. He wants to steer Syria's economy away from farming and into sectors like real estate, tourism, and luxury construction. "Bashar is a son of the city and a man of Damascus," says Jihad Yazigi, editor-in-chief of *The Syria Report*, an online economic bulletin. "He represents the economic interests of the new elite."

By the early 2000s, farmers in Darayya, a town in the Ghouta famous for its grapes, are already struggling to irrigate their trees. During the war, Darayya will be one of the first areas to rebel; later, it will be famous, like much of the Ghouta, for a government campaign of siege and deliberate starvation called "kneel or starve."

In the early 2000s, farmers pay huge sums of money to dig wells and buy fuel to pump water through 700-meter hoses. But the groundwater is disappearing. Generational farmer Salem al-Athuak invests a lot of money on two wells, each 120 meters deep, and gets nothing. Those lucky farmers who have access to wells that still draw water rent them to their neighbors. "If you have large trees and you are worried they'll die, you will rent water by the hour," he says.

By July 2001, water is so scarce that the government shuts off the water supply to Damascus for 16 hours a day. In 2002, when officials from Assad's Baath Party show up to a farmers' festival in Raqqa, farmers drive them off, throwing stones and shouting: "Corruption sucks the lifeblood from farmers!"

In 2004, a $5 billion development project by the Japanese government is supposed to bring water to towns in the Ghouta from nearby rivers. But the water never makes it to the farmers in Darayya. By the time it passes through politically connected areas —housing developments, officers' houses, "big farms and important people," says al-Athuak—nothing is left.

Most of al-Athuak's trees die. The only ones that make it are the tough native trees that know how to survive on hardly any water: olives, figs, pomegranates. Some farmers go back to traditional rainfed crops like okra and me'ti, the dense, deeply ridged heirloom cucumbers that Syrians have grown for centuries.

In 2005, Bashar announces that he is going to transition Syria's economy from state socialism (at least in name) to a "social market economy." In theory, that's a hybrid economy that combines free-market capitalism with a social safety net. But Bashar and his wife Asma, a former JP Morgan investment banker, both subscribe to the neoliberal creed that poverty can be cured, or at least obscured, by the soothing incantation of keywords like "opportunity" and "development." Asma al-Assad, according to her public relations materials, "firmly believes that the sustainable answer to social need is not aid but opportunity."

In reality, Assad's shiny new "reforms" are simply privatization without competition, otherwise known as oligarchy. The "social market" economy is just monopoly gangster capitalism with a side of neoliberal bootstrap. The market for farmers is an old-fashioned monopsony: as the price of water and fuel go up, the money that farmers get for their crops, set by the state, remains much the same.

Rural areas that once thrived are slowly being starved of resources—natural, economic, and social. Rural unemployment goes up. So does resentment against the government and the new urban elite. As capital flees the countryside, farmers begin migrating to cities in search of Asma's elusive "opportunity."

The vulnerabilities that Marwa Daoudy's book analyzes—corruption, unemployment, poverty, groundwater depletion, and austerity—are all converging on the most economically precarious people: those who grow the nation's food.

"We felt," says al-Athuak, when I interview him years later, "like exiles in our own country."

Social Explosion

When the drought hits, in the winter growing season of 2006–2007, Assad is flirting with the West, and the West is flirting back. That spring, US House Speaker Nancy Pelosi visits Damascus and meets with Assad. She tours the old city and pronounces it wonderful. Syria, says *The New York Times*, is "creaking open to the West after decades of closure."

But inside Syria, doors are creaking shut. When I get to Damascus, in that hot summer of 2007, the government has just sentenced five writers, dissidents, and human rights lawyers to years in prison. In the past few weeks, the government has arrested about 200 people, mostly in Aleppo. All young. All in their 20s and 30s. "And the minimum sentence they're getting is five years," says Lina Sinjab, our journalist friend. "That's the *minimum*."

The next day, there is an explosion outside of Aleppo, in a weapons storage warehouse. Eighteen soldiers killed; between 50 or 60 injured. The government claims the heat caused the weapons to explode. Lina doesn't think the explosion is an accident.

Everything is exploding. "Two nights ago, in Saydnaya, where I live, there was a huge explosion right next to our house," says another friend. "All of a sudden, the whole house was lit up. We were so scared! We just sat in our house and waited to see what would happen."

There is a weapons warehouse next door to their house too. "Are there weapons warehouses everywhere?" I ask, laughing.

I am joking, but she nods, perfectly serious: yes.

On our last evening, we sit on Lina's balcony and eat cherries and watermelon out of a blue bowl. There have been many small attacks here and there, she says. Nothing big—not like the Brotherhood uprising in the 1980s. But a series of little fires that will spread across the country like a string of firecrackers if they are ever connected.

"There is something going on," she says, slowly, looking out over the tall buildings, the trees, the parks. "Something boiling behind this peaceful-looking country."

Leakage

In 2009, the third year of the drought, international food and fuel prices are peaking, farmers are on the brink of starvation, unemployment is increasing, and inflation is soaring. Assad chooses this moment—amid the global financial collapse and third year of drought—to lift the state's long-standing subsidies on fuel and fertilizer. This is one of the austerity measures that Western institutions like the IMF, the EU, and the World Bank have been recommending for years. Fuel prices skyrocket.

For the IMF, this is a resounding success. The IMF's rosy 2009 staff report on Syria—the last one it will issue, as it happens—reads like a dispatch from another planet. In this tidy never-world, the Syrian authorities are implementing gradual but wide-ranging reforms to "transition toward a social market economy." The IMF recommends that Syria accelerate these "structural reforms."

The drought comes up exactly four times in 41 pages. Water is never mentioned at all. As for the increase in fuel prices, it is exactly what the country needs: "The increase in domestic energy prices reduced the cross-border leakage of subsidies," the IMF notes approvingly, "as reflected in the subsequent sharp reduction in diesel and fuel oil consumption."

Because of The Drought

Here's what that "sharp reduction in diesel and fuel oil consumption" means for Syrian farmers: catastrophe. Overnight, their costs quadruple. They can't afford to pump water from wells, use tractors, or transport their crops to markets. Many farmers end up feeding ruined crops, like sugar beets, to their sheep.

The lethal combination of austerity and drought squeezes farmers in an ever-tighter vise: as water disappears, they need to drill deeper wells; but higher fuel prices make that impossible. "The farmers would suffer six months, work so hard and put in so much effort, only for the government to earn four times what they did," says Walid al-Yousef, a Syrian farmer from the countryside outside Aleppo. "This is what pushed us toward an agricultural revolution."

The fuel prices make it pointless for many farmers to continue farming. They can make more money selling their land to Qatari investors than by farming it. All of the people who once worked on those farms are now out of a job.

By the 2009–10 growing season, as the IMF issues its glowing economic outlook for Syria, and ICARDA publishes its report boasting of Syria's wheat production, and *Condé Nast Traveler* declares "Dawn in Damascus," the UN and the Red Cross estimate that over 800,000 people in Syria's traditional wheat-growing region have lost their livelihoods. Up to 80 percent of those people, says the UN, "live mostly on a diet of bread and sugared tea, which is not enough to cover daily calorific and protein needs for a healthy life."

So much for ICARDA's promise to be an insurance policy against food running short. In a country that has the world's finest agricultural consultants in its back pocket, that has been raking in $350 million a year from wheat, the people who had historically grown that wheat are living on the brink of starvation.

In December 2009, Syrian Prime Minister Naji al-Otri blames Syria's economic problems on "the climate changes and drought which Syria suffered during the past three years." In March 2011, as the uprising begins, Bashar al-Assad gives a speech. He speaks about "a huge conspiracy" against him—and, like al-Otri, he blames the drought.

Over the next ten years, as the crisis spirals into a bloody conflict, Assad will rally his supporters periodically, especially at times of political tension, to gather at mosques throughout Syria and pray for rain.

Stressor

Western pundits picked up Assad's narrative and amplified it with gusto. In 2013, *The New York Times* columnist Thomas Friedman wrote that climate change was the "scary hidden stressor" that "helped to fuel the revolutions." A stressor, he notes, quoting scholar Anne-Marie Slaughter, is a "sudden change in circumstances or environment that interacts with a complicated psychological profile in a way that leads a previously quiescent person to become violent."

Climate change makes people hungry; hunger makes them violent; all those violent hungry people cause conflict. From this chain of dubious propositions, Friedman fashioned a new dogma: a climate-fueled drought, he argued, was "one of the key drivers" in Syria's uprising and subsequent war. He predicted that "in an age of climate change, we are likely to see many more such conflicts."

A climate scientist named Colin Kelley read Friedman's argument and was inspired to write a paper about it. To bolster the key contention that the drought was instrumental in "pushing people toward revolution," Kelley cited Friedman's column. To this day, media outlets all over the world now cite Kelley's study, citing Friedman, as scientific proof of Friedman's own assertion that climate change was "a key driver" in the Syrian conflict—including, inevitably, *The New York Times*, which publishes Friedman.

"Drought helped push many Syrians into cities before the war, worsening tensions and leading to rising discontent; crop losses led to unemployment that stoked Arab Spring uprisings in Egypt and Libya; Brexit, even, was arguably a ripple effect of the influx of migrants brought to Europe by the wars that followed," wrote *The New York Times Magazine* in July 2020. That article proclaimed that "The Great Climate Migration Has Begun."

To bolster its argument that "the influx of migrants" has begun—bringing with them war, instability, and some sinister influence that instigates the British, previously a reasonable people, into Brexit—that article cited Kelley's study, the one that cited Friedman's columns in *The New York Times*—a perfect punditry ouroboros. The narrative drives the science, and the science, in turn, drives the narrative: a perpetual motion machine, a kind of water wheel like the norias, endlessly churning, powered by a river of bad ideas.

It's The Austerity, Stupid

Thomas Friedman praised the IMF for urging Arab states to remove subsidies and said it would make Arab states more "resilient." The undemocratic rulers who were squeezing their populations dry, literally as well as figuratively, could fix it all by simply squeezing them even harder.

But if any one factor can be said to have "triggered" the Syrian revolution, it was exactly the policy that Friedman was praising: imposing austerity measures, with no safeguards, on a countryside already sucked dry of environmental or economic resilience by decades of exploitation and neglect. By repackaging Assad's excuse, Friedman was absolving him of responsibility. "This argument has been pushed forward by a lot of the people who were in power in Syria, the economic decision makers," says editor Yazigi. "Because when you say it's the drought, you basically say 'It's a god-made problem that caused the uprising, we have no responsibility.'"

Every Syrian I spoke to pointed out three things: that the drought was terrible for farmers; that climate change did exacerbate it; but that farmers could have come through it fine if their government had not mismanaged water resources for decades—and then left farmers to pay for the consequences.

“It was not a drought that was dangerous,” says Walid al-Yousef, the farmer from outside Aleppo, who farmed through many droughts. “What we needed was a change in the types of crops.”

Political scientist Haian Dukhan, now a lecturer in politics and international relations at Teesside University, conducted field interviews in the areas affected by the drought. “The eastern part of the country is rich with natural resources, oil and gas,” he says. “A lot of people said: ‘If we were able to get jobs in that sector, or if the resources in that part of the country were distributed naturally, then the drought could have had zero impact on our life.’”

Daoudy thinks the government could have averted the crisis if it had taken adaptation measures instead of austerity. “When you decide to liberalize the agricultural sector at the time of a severe drought, you’re adding to the climatic vulnerability,” says Daoudy. “In Morocco, for example, you had a very severe drought in 2016. Why doesn’t it lead to conflict? Because there were different policies, decisions taken at the time, by the elites.”

Infiltration

On November 13, 2015, Islamic State attackers killed 130 people in a series of coordinated attacks in Paris. Western journalists consistently describe the Paris attackers as having left Syria to “infiltrate Europe,” or having “arrived on Europe’s shores from Syria posing as refugees.” As a result, most Westerners associate the attacks with Syrian refugees.

But none of the attackers ever identified were Syrian refugees. Those who were identified were EU citizens, Belgian or French. A few of them had, in fact, infiltrated Syria to join the Islamic State.

The Paris attacks came just two weeks before a historic climate summit in Paris. And in the days after the attacks, a chorus of Western pundits used them, and the Syria myth, to warn the West of “climate-fuelled violence and migration.”

“The connection between warming temperatures and the cycle of Syrian violence is, by now, uncontroversial,” wrote Jason Box and Naomi Klein—citing, of course, Kelley’s study. They recommended planting trees in order to help Middle Easterners to “stay on their land.”

Climate change, refugees, the Islamic State, and “Syrian violence” all became linked in the popular imagination. “Climate change feeds terror” became the new narrative. Migrants and refugees fleeing conflict or catastrophe became potential terrorists. If climate change was a “threat multiplier,” then refugees themselves were now the threat.

And it’s not just Syria. Today, the pundits say climate change is driving Taliban recruitment in Afghanistan. Climate change is causing Honduras and Guatemala to send an “influx of migrants” to America’s southern border and causing the border crisis in the United States. Climate will cause “up to a million” migrants per year from the global south to seek asylum in Europe by the end of the century. Climate change “feeds terror” and helps groups like Boko Haram. One study even tracked how weather variations in “source countries” in the global south translated into asylum applications to the European Union, citing a body of quasi-Victorian science which purports to prove that heat, and therefore climate change, creates “violence-prone individuals.” It cited, you guessed it, Kelley’s study.

In this version of events, climate change is always the decisive factor. Never mind the 20 years of a violent, pointless, and failed war on terror that killed countless Afghan civilians. Pay no attention to the decades of American-backed coups that transformed Honduras into a narco state. Or to the failed war on drugs that turned Guatemala into what one journalist recently called, as security forces were dragging him into a tribunal on trumped-up charges, a “narco-klepto-dictatorship.” And definitely don’t mention the fact that the overwhelming majority of climate migrants—oh yes, they are real—migrate internally, inside their own countries.

An Apolitical Food Problem

Because climate change has made countries like Syria, Honduras, Guatemala, and Afghanistan so unstable, goes the new myth, the only way to stop these migrants from coming is to increase the large-scale global production of food—using increased amounts of pesticides, fertilizer, and expensive tech—in order to “feed the future,” maintain political stability, and prevent migration.

But these apocalyptic warnings that the world is running out of food ignore an uncomfortable truth: people don’t starve, or rebel, or migrate because there isn’t enough food. They do these things because food is available—but not to them.

In 1981, an economist named Amartya Sen discovered a disturbing paradox about a World War II-era famine in Bengal. While 3 million Bengalis were starving to death in the famine, the country was producing just as much food (if not more) than in previous years.

What made the famine so deadly was a lethal convergence of simple economic laws: political instability led to price volatility, grain hoarding, and people not being able to work. The result was that people who needed food the most did not have the money to buy it. Democracy, Sen concluded, was what Bengal needed more of, not food. "There is, indeed, no such thing," wrote Sen, "as an apolitical food problem."

Sen went on to win the 1998 Nobel Prize in Economics. And yet, to this day, most of us still think that hunger means there's not enough food—and that the solution is growing more of it.

The idea that growing too much food could result in hunger is so counterintuitive that it's almost impossible for most of us to grasp. But strange though it may seem, what happened in Syria is exactly that.

Involution

For the West, the Syrian conflict is over (for Syrians it isn't). But the Syria myth, and the atavistic fear that spawned it, is still shaping our responses to new crises, from coronavirus to currency collapses to the war in Ukraine. Today the fear of hunger, migrants and instability has become so ingrained—thanks, in large part, to the Syria myth—that the looming, climate-driven global famine and "Great Climate Migration" now seem as inevitable to us as they did to Malthus and Ehrlich.

That feeling of inevitability is pushing policymakers toward a dangerous inward spiral that anthropologists and economists call an involution trap: when failed agricultural policies result in economic stress, institutions often respond by doubling down on exactly those failed policies that caused the stresses, leading to a death spiral that can result in catastrophes like famines. The case of Syria, where the government's neglect forced farmers to keep digging deeper wells, instead of diversifying crops and modernizing irrigation systems, is a perfect example.

Today the whole world is facing the same choice that Syria did. Pundits and policymakers are heading us in two directions. One requires a revolution in the way we produce food, toward a more sustainable system of small-scale agroecology that will produce less carbon—and, if done right, feed farmers as well as everyone else. The other, which is dominant, is pushing us toward an involution trap, using Malthusian fears to justify doubling down on exactly the failed policy that caused Syria's problems in the first place: increasing agricultural cash crop production at the expense of sustainability.

Worldwide, agriculture accounts for 70 percent of all groundwater extraction. In Syria—or California, for that matter—large-scale, extractive cash crop agriculture drains irreplaceable water reserves and intensifies water shortages and droughts. Globally, crop agriculture accounts for about 10 percent of carbon emissions (animal agriculture is about 20 percent). Industrial cash-crop agriculture has degraded soil, sucked aquifers dry, and led to widespread desertification and deforestation—and that's not counting other environmental effects, like erosion, algal blooms, biodiversity loss, and, of course, drought. On top of all that, it has often failed, spectacularly, in the goal of feeding people—as it did in Syria.

Climate change is indeed the signal catastrophe of our time. Natural catastrophes have quadrupled in our lifetimes. And climate-fueled catastrophes are making food supplies more unpredictable and prices more volatile. But the forces that make people starve—and ultimately rebel—are power imbalances like income inequality and undemocratic governments. If we can acknowledge that the roots of the Syrian drought and uprising were political and economic, then we can find political and economic solutions to other conflicts. And that will also be good for the environment, because over-extraction of natural resources, for the benefit of a few, is another product of those undemocratic forces.

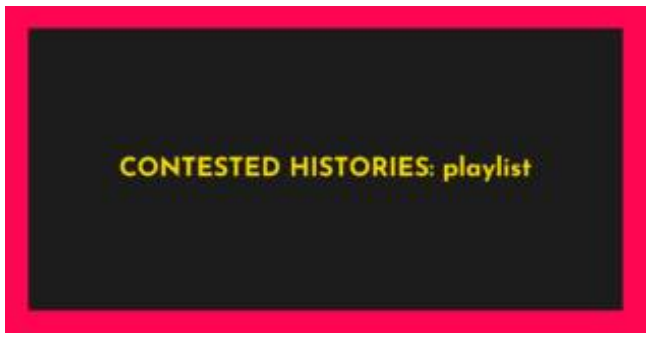
This is why it's important to get the real roots of the Syrian conflict right. It's understandable to want a talking point against the absurdity of climate change denial. But using a war to prove a point—and grossly oversimplifying it in the process—is dangerous because it obscures the economic and environmental brutality that caused it, and thereby allows that brutality to continue.

The Syrian conflict is a warning to all of us in the Anthropocene—but not the way we think. It's a warning to the entire world about what *not* to do as the climate changes. Today, rivers like the Barada are disappearing all over the world, even as the seas rise. Climate change is indeed making this worse. But one of the key reasons is the one we keep overlooking: a massive bill coming due in an account we all opened back in those heady days of the Green Revolution, when everything seemed possible, if only we just kept growing more and more food.

ANNIA CIEZADLO

Annia Ciezadlo is an author and journalist who writes about food and power in crises and catastrophes, from wars and revolutions to coronavirus and climate change. She is the author of *Day of Honey: A Memoir of Food, Love, and War.*

also in this issue



Playlist

A Soundtrack to Issue 11

We asked each contributor to Adi's eleventh issue to share a song that resonated with their piece. From Anna Badkhen's

Intervention

Poem

Excerpt from Donkey Days

ATHENA FARROKHZAD

But will there really be a revolution after the night of revolution // and will it belong to our daughters if it comes

Violence

Analysis

The Lawman Outla

HAWA ALL

Which dueling creati victoriou

Violence

past issues