

TIMES EVOKE

THE IRAN-Y OF IT ALL

Persia is pure paradox. Iran has one of the world's oldest and grandest civilisations, which has given humanity the science of constellations, the physics of canals, great palaces, breath-taking art, poetry that makes you cry in delight, literature that opens your eyes, algebra, algorithms, an ancient charter of rights. Today, it is known for street protests demanding the most basic entitlements — and astonishingly brutal reprisals. For the December 2025-January 2026 revolts, the world is hearing whispers of over 2,000 people having been killed. Yet, Iran is not a society based on sadism — so, what has brought this polished polity, boasting fine scientists, mathematicians, entrepreneurs and artists, to this pass?

The story, in large part, is about fossil fuels and the life — and death — these bring. In 1908, oil and gas were discovered in Iran. These galvanised Western interests to extract relentlessly, entering a comfortable agreement with Iran's regal Pahlavi regime and consequently, while enabling Parisian couture and Italian vacations for its elites, throwing a few pennies in the face of its people. Eventually, Persia fought back, throwing out oil invaders and establishing an iron-clad regime. This was to safeguard Iran from more oil imperialism — tragically, the nation was collectively punished with economic sanctions from the West. As the world outside shrank, Iran's inner world choked — today, with fossil fuel wealth controlled by a handful, over 30% Iranians live in absolute poverty, facing 70% food inflation. As the Iranian rial plunges — recent protests were led by traders, driven to desperation by soaring prices and grinding poverty — its people also confront toxic air pollution, sparked by intense fossil fuel development, and a multi-decadal water crisis, rivers diverted to mega-agriculture as sanctions force a choice between self-sufficiency or oil slavery. Meanwhile, climate change is raising temperatures in Iran twice as fast as worldwide, making water ever more crucial — and rare.

There are solutions though. As Times Evoke's global experts emphasise, learning from Iran's rich ecological histories, whether its 2,500-year-old system of underground canals or its 1950s discourse of abjuring high AQIs, is essential. Establishing more clean renewable power is crucial as is reconsidering sanctions which mainly punish Iran's already-suffering masses while the rich eat cake. Also, other nations must see Iran as a warning now — the Persian Paradox of fossil fuel-ism will not stay limited to Tehran in a global Anthropocene of warming climates and resource extraction. Join Times Evoke as we explore Iran — and hope to avoid more tragic Iran-ies.

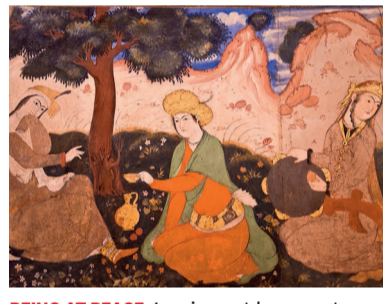
'Drought to heat, Iran is facing environmental catastrophes — that is wrapped in its protests'

James M. Gustafson is Associate Professor of History and Chair of International Studies at Indiana State University. Speaking with **Srijana Mitra Das** at Times Evoke, he discusses ecology, polity and history in Iran:

What is the core of your research?
The focus of my research is integrating environments and non-human actors into Iran's history. My new book 'The Lion and the Sun' is the first work on Iran's modern environmental history, looking at how human life has intertwined with environmental factors and non-human actors, like animals, plants, water, soil and climate, which people have reshaped to their own needs.

What are some defining features of Iran's environment?
Iran is remarkably diverse in terms of its landscapes. It has a very dry, arid interior, surrounded by two large mountain ranges, making this large rain shadow in the centre. Within that region, there has historically been a great dependence on irrigation systems, like the famous Qanat system of underground wells. Alongside, there are expanses of grasslands in many in-between places, populated by pastoralists and animal herders over long stretches of time. Then, across the Alborz range in the north, you have rainforests and lush foliage.

Your research finds a link between the 'Little Ice Age' of the 18th century and Iran's decline — could you elaborate?
It's important to note climate change was a factor in reshuffling global power arrangements. Over the 17th and 18th centuries, agrarian land empires throughout the northern hemisphere were put under enormous pressure by changes in climate patterns — in some areas, that meant long droughts, in others, rain, flooding and erratic weather, as seen with global warming today. Remarkably, Iran rode out that crisis a bit longer than elsewhere in Eurasia, China or Northern Europe. The Safavid dynasty ruling Iran



BEING AT PEACE: Iranian art loves nature



FROM THEN TO NOW: Once a river of poetic fullness, the Zayanderud is now in severe water decline, sparking pain, prayers and protests as towns reliant on it face parched landscapes and dry taps, the situation sparking fears of Day Zero or no water

then were an advanced bureaucratic state — but the deeper problems driven by climate change caught up with them. Those included drought-produced food shortages and huge epidemics, with the loss of a third to half the population. That undermined the system — the Safavids fell.

When we integrate a bigger picture, extending beyond people into environmental change, we understand how Iran went from being a major commercial and military power in the early modern period to a weakened, divided state by the time of British and Russian intrusions in the 19th century. The collapse of the Safavids was also followed by seven decades of warfare, with people like Nader Shah building massive armies, hoarding grain and horses, driving the crisis even deeper.

What role has oil played in Iran?
Many have written about oil as a corrupting form of cash distorting the country's politics — but that is only a small part of the picture. Oil is a fluid resource, located in enormous quantities in many places. As Tim Mitchell writes in 'Carbon Democracy', it needed business arrangements to limit production levels and create artificial scarcities to make this profitable — that was in conflict with the needs of states which were paid royalties based on domestic production levels. Oil indus-

trialisation in Iran also required new forms of property rights to negotiate between the state's claims about the Shah owning all natural resources versus people having rights to which he could sell to foreign investors. The industry also required building infrastructure and expertise in state agencies to manage it — oil further meant the creation of an industrial working class which became politically active in Iran since the mid-20th century.

What are some contemporary Iranian experiences with water and air?
Iran has been facing an environmental catastrophe in recent years. Part of this comes from a drive for self-sufficiency, which has led to unsustainable agricultural practices — over 90% of the water use in Iran goes to massive industrial agriculture on a level that lands and aquifers cannot sustain. Kaveh Madani has called this 'water bankruptcy'.

So, do water concerns drive political protests in Iran today?
I won't speak on behalf of Iranians who are standing up

to claim their rights and have been met with enormous state violence. However, clearly, grievances against the Islamic Republic have brought together calls for political rights alongside environmental justice. In 2021, for instance, before the 'Woman, Life, Freedom' protests began, there were widespread environmental protests in Iran, most notably in Isfahan, where the Zayanderud ran dry from water being diverted to agricultural projects. Such concerns got wrapped into questions of other political rights. There is writing discussing how the Islamic Republic has moved water through big inter-basin transfer systems away from marginalised communities to agriculture in the Central Plateau. That has placed a disproportionate burden on people who were already struggling — the urban poor living on the outskirts of Tehran face industrial pollution. They lack basic public services but confront shortages of water and energy with rampant inflation and unemployment. In recent years, a convergence of multiple grievances has occurred — which includes environmental issues.

What is climate change like in Iran?
As in the past, climate change is a factor in the water crisis, straining already vulnerable sys-

tems. Yet, the bulk of the problem is decades of unchecked development that has treated water as if it is an infinitely renewable resource. Once aquifers are drained though, the earth tends to compress them and diminish their capacity. This has happened there and the situation is so dire, President Pezeshkian has actually stated the government intends to move the capital from Tehran to the Makran coast. We often talk about climate change as if it's reshaping the world at will — but it's just amplifying problems people have already created.

What are the diverse sources your research draws upon?
Environmental history allows you to use familiar sources in new ways. Historians once tended to focus on human systems, ideas and cultures to such an extent, we missed how interdependent we are with other elements of our environment. So, in 'The Lion and the Sun', I brought together sources as diverse as land grants and endowment deeds with the growth rings of juniper trees, Persian geographical writing, court chronicles and corporate archives. It is important to ask new questions and broaden our view of what constitutes 'history'.

What relationships do Iranians have with the world of animals, birds and plants, which is a significant part of Iranian life?
There has always been a very active sense of nature in Persian literature and Iranian cultures. This goes back as far as we can see. Zoroastrianism, for instance, has a very strong sense of nature. The New Year Nowruz celebration marks the rebirth of the year with spring and the arrival of the agricultural cycle as an annual renewal. That's a key thing Iran lost in the modern period — this sense of human and non-human nature inhabiting the world together, rather than humans dominating nature. Coexistence is very deeply embedded in Iranian culture, with a sense of nature being an active force in our life.



IN PIECES: Iranian protests face crushing

THE OTHER IRAN

Iran, famed for its woolen carpets, has **fabulous species of sheep**, from the **Ghezel to Moghani and Red Sheep**. These exemplify contradictions. They are vigorously sheered — Iran's **yarn market** is valued at over \$140 million — or hunted for their beautiful fur and pelts. However, Iran also provides **protected reserves across the Alborz and Zagros mountains** for these sheep to forage in and freely roam. So, are they commodities — or creatures with their own lives? That is the question

Spanning sandy expanses to icy peaks, Iran has **hundreds of bird species** — endemic to it are the **Iranian Ground Jay** which lives in deserts and the **Iranian Tit** of deciduous forests. An oft-spotted bird is the **kingfisher**, seen around **Iran's riverbanks** — today, as the country faces **human-induced water shortages**, these birds also experience **habitat loss and shrinking food sources**, fewer magical shimmering beings darting across the land

While its people often seek free flight, Iran's **multiple butterfly species** do exactly this — it has over **440 known species**, with endemic butterflies like the robustly-named **Archon Bostanchii** and the **Iranian Festoon**. One of its most endearing kinds is the **Snow Apollo** which **thrives in freezing altitudes**, at times, changing colour to blend into the snowy landscape, **symbolising resilience and hope for humans as well**

Research: Smithsonian Magazine, BBC, National Geographic

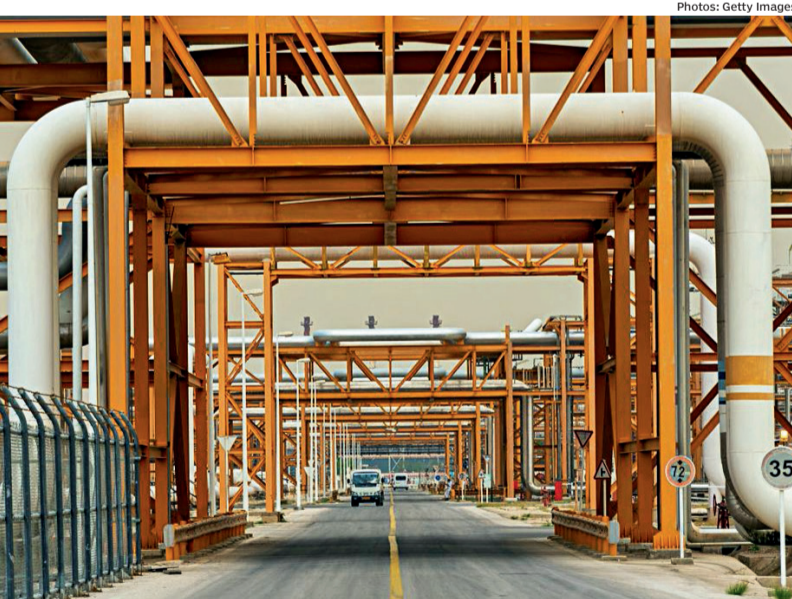
'Natural gas development in Iran began against energy colonialism — its path led to pollution and inequality'

Ciruce Movahedi-Lankarani is Farhang Foundation Chair of Iranian Studies at USC, Dornsife. Speaking with **Srijana Mitra Das** in TE, he maps the complex history of natural gas in Iran:

The backdrop to Ciruce Movahedi-Lankarani, perhaps very appropriately, is a set of silvery screens. These glow with a mysterious, pearly light, a pale blue that reminds you of Iranian mosaics, while there is a tiny sliver of sudden bright sky somewhere above. Currently though, the academic is describing something far removed from this cerulean world — natural gas, deep inside Iran's earthy depths.

Discussing his research, Movahedi-Lankarani says, 'I focus on the history of modern Iran roughly from the beginning to the end of the 20th century. I focus particularly on how energy infrastructures, specifically natural gas usage, shaped Iranian development and environmentalism. This is, in many ways, a story of Iran's pre-revolutionary and post-revolutionary states merging modernising development with an anti-colonial politics of resource nationalism.'

Natural gas was discovered alongside oil in commercial quantities in 1908 — it has travelled a long way. 'From the 1950s', says the professor, 'natural gas went from roughly zero of Iran's energy to three-quarters of energy use.' Gas became intertwined with Iran. Movahedi-Lankarani says, 'In my research, I emphasise how we should consider natural gas and oil not as two distinct



PIPED DREAMS? Natural gas pipelines in Iran highlighted national self-sufficiency and sovereignty — yet, it has also meant hazardous ideas of dominating nature and ecology

substances but two aspects of a single continuum or hydrocarbon spectrum. When Iran was producing oil, whether via foreign companies or after the Revolution, with the nationally-run oil company, they were also inevitably producing natural gas. A core challenge became — what do we do with all

this gas we are currently discarding? That got wrapped into the country's polity particularly after 1953 and the coup against Prime Minister Mohammad Mossadegh, with the reimposition of foreign control over Iran's oil. Foreign oil firms had no interest in gathering this gas — it was thought far too expensive a prospect. Hence, it fell to Iranians themselves to claim the gas, build markets

Which technologies were key in the development of this energy? Movahedi-Lankarani replies, 'In my book 'Accelerant', pipelines figure prominently — they embodied what the pre-revolutionary and post-revolutionary governments sought as a developmental model. Both the Pahlavi state and the Islamic Republic emphasised the mastery of technology and dominating nature. That became part of the construction of massive gas refineries and huge pipelines spanning the country. Those were very expensive and challenging to build,

particularly in Iran's mountainous topography. So, the ability to construct these was infused with ideas of Iran's self-sufficiency.'

How did the development of natural gas, which empowered generations of Iranians, link into environmental unease? Movahedi-Lankarani explains, 'Just when Iran was starting to build its natural gas infrastructure, the country was industrialising rapidly — so, between the late 1940s to the mid-1970s, there was a very precipitous decline in the air quality of Iranian cities. Tehran is still famously a city with poor air quality. Importantly, Iranians understood they were losing something with this — they were leaving behind some of the natural beauty, the peace, the environmental joy they had. Iran is a beautiful nation and people valued that. They looked at the cities of Europe, North America and the Soviet Union, where they saw very polluted citiescapes. This was before the introduction in these places of laws and efforts to clean up these environments. So, Iranians, looking at the horrific smogs of London or people perishing from air pollution in Los Angeles, said, 'We don't want this dark downside of the industrialised world.' They could see the same thing happening in their own cities, particularly

Tehran, because of its topography, being in a bowl in the mountains where it collects air pollution. Yet, as and get it there, which thus infused this technology with the politics of anti-colonial resource nationalism and sovereignty'

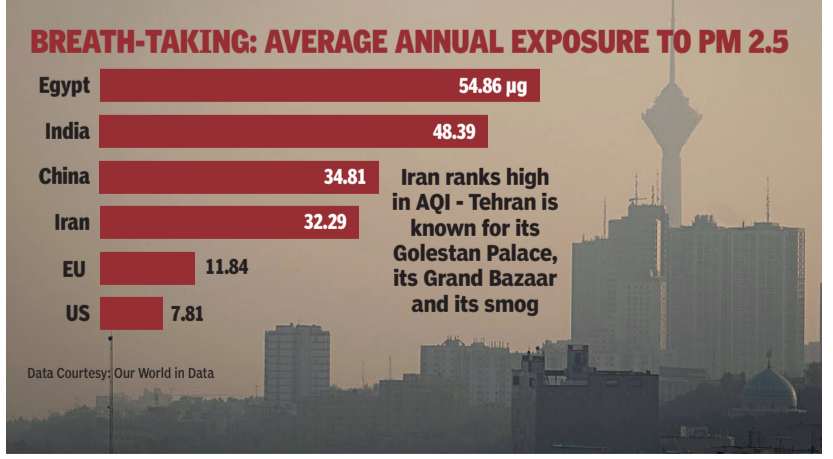
Speaking of 'wealth brings to mind the Paradox of Persia — why, with such fossil fuel abundance was there still such large-scale deprivation, sparking off furious protests?' Movahedi-Lankarani says, 'One of the core promises of the Iranian state since the 1950s has been development, with economic and social justice. The state told

the people — we will help develop your lives, you will grow more wealthy. This was something the pre- and post-revolution states said and, to some extent, both succeeded — except both also saw extensive economic inequality and corruption. That was a core complaint which animated the 1979 revolution, a revolt against economic inequality and the Shah's patronage regime and its corruption. For a time, the Islamic Republic did a decent job — since it had based its legitimacy on this, it rapidly built things like natural gas networks in villages and working-class neighbourhoods that had been left earlier.'

Movahedi-Lankarani pauses, then emphasises, 'But that changed over time — in the Islamic Republic, increasingly, extreme income inequality and inequality in general has grown between social classes. Wealth has become concentrated at the top of the social hierarchy — that is linked in part to an authoritarian and aloof governmental system. It's also been accelerated by Iran's foreign conflicts and the sanctions regimes that have largely cut off Iran's economy from the broader world — as that happened, powerful figures within Iran's government, mostly notably, the Revolutionary Guard, have come to control Iran's export sector. Through both smuggling and controls on smuggling, you now have enormous oil pooling within a very small slice of Iranian society — and this is feeding directly into the discontent we see in Iran today.'



TALK ABOUT IT: Natural gas means much to Iran, from freedom to fuel dependency



VAPOUROUS...

READERS WRITE

Dear Times Evoke,

I read the TE anniversary issue (4th January, 2026) and felt extremely happy Times Evoke has completed five years of its spectacular journey. I checked all my mails sent to Evoke over the years and my memories came alive! Whether Chandrayaan's lunar landing or oscillations and ocean currents, solar flares, grafting of flowers, unbridled fracking, even in Greenland, avian success stories from Udaipur, historical underpinnings of rice cultivation in Asia, Jane Goodall's legacy, etc., I owe so much knowledge to TE. Wishing TE's team more success!

— Ravi Neelakantan, Secunderabad

I loved TE's beautiful anniversary special edition and congratulate TOI for TE's wonderful work in discussing crucial issues of the environment, science and geopolitics with the greatest world experts. TE also showcases these discussions uniquely, with in-depth data and aesthetic presentations. In times of media 'noise', this has made TE a household favourite. Here's to more excellence.

— Dr Kavita Singh, Noida

I'm a teenager and was spending my days with little curiosity until my father suggested I should read TOI. And now, I am obsessed with TE's fabulous articles, full of discoveries! I look forward to reading more of TE's interesting pages. Thank you, TE, for helping me shape my personality.

— Saubiya Iftakhar, Muzaffarpur

Thank you, Times Evoke, for your anniversary piece. "Who will read this?", you were asked when TE was started. Well, I have been reading all of TE's articles without fail. Your articles are very insightful. Keep up the good work!

— Professor S. Manikutt, IIMA (Retd.)

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