Water populism and the Iranians' collective adipsia

Majid Labbaf Khaneiki¹ | Matthias Schmidt² | Abdullah Saif Al-Ghafri¹

¹UNESCO Chair on Aflaj Studies and Archaeo-Hydrology, University of Nizwa, Nizwa, Oman

²Institute of Geography, University of Augsburg, Augsburg, Germany

Correspondence

Majid Labbaf Khaneiki, UNESCO Chair on Aflaj Studies and Archaeo-Hydrology, University of Nizwa, Nizwa, Oman. Email: labbaf_majid@unizwa.edu.om

Abstract

This article examines Iran as an example, where the water crisis is dealt with through denial, projection, and securitization approaches, described as "water populism." The Iranian polity systematically adopts denial and projection approaches to obscure an underlying causal chain whose first ring is ideology, and then, it resorts to the securitization of water to safeguard these approaches against public criticism. Ideology prescribes an intensive hydraulic mission to facilitate "strategic industries clustered together in the central desert" and "self-sufficiency in food production," in the wake of its antagonism toward the world's powers and the ensuing sanctions. This hydraulic mission international depletes the country's water resources and results in "water bankruptcy" that is reflected in ecological degradation and socio-economic disintegration. Ideology not only obstructs the genuine process of problem solving but also gives rise to water populism that serves as a political sedative by either disavowing the water crisis or attributing the crisis to a wide range of technicalmanagerial factors or stifling dissenting voices. Any solution to Iran's water crisis seems infeasible in the absence of an ideological reform.

KEYWORDS

ideology, socio-hydrology, water crisis, water policy, water populism

1 | INTRODUCTION: A PROBLEM STATEMENT

Adipsia is a pathological condition that is characterized by the absence of thirst even when the patient's body is dangerously dehydrated. This term metaphorically reflects the situation of Iran where populism distracts the public from the increasing alarm of water crisis. Although it is difficult to determine whether populism is an analytic category or only a political epithet, its socio-economic and environmental consequences are undeniable. All forms of populism—regardless of their different political philosophies—are similar in that they all claim that they alone represent the people, their exclusive representation is always moral, and they demonize their critics as part of immoral (Müller, 2017). Populist politics tend to define an accustomed way of life, which should be protected against those regarded as either cultural or geographical outsiders. They portray themselves as the people's saviors who have been singled out to safeguard a set of values (Brubaker, 2017).

When it comes to environmental problems, populist politics fasten on physical-managerial factors, without questioning the power relations or socio-economic structures that underlie those problems in the first place. Swyngedouw (2022) calls this type of political behavior fetishistic disavowal that refers to using a physical factor like greenhouse gasses as a scapegoat for the problem of climate change. It seems that the politicians know that something like excessive CO2 is only the product of power relations but they obsessively blame it as an outsider that threatens the people and their established order. Water populism involves the same fetishistic disavowal that tries to conceal the ideological fantasy responsible for hundreds of unnecessary dams, inter-basin water transfer, groundwater depletion, and anthropogenic droughts.

Zetland (2014, p. 14) uses the term "water populism" when he describes the economic and political aspects of the government's response to water scarcity in the countries Spain, the United States, and Saudi Arabia. In his case study, water populism is characterized by the government's preference for the development of water supply rather than the optimization of water consumption. Piper takes a step further and claims that a form of water populism is taking place on a global scale. She uses the example of "World Water Forum" that is held every 3 years for the purpose of solving the world's water crisis. This forum is always attended by UN officials, international water specialists, ministers, and tens of state leaders from around the world. The "World Water Council" organizes this forum under such slogans as "Water Security for Peace and Development" and "Water for Our Future." However, Piper (2014) suspects that this event is akin to a populist campaign that suckers the Global South into believing that a state control over water supply systems is the underlying cause of their water problems, and then, the privatization of water is the remedy.

World Water Forum uses the definition of "water as an economic good" to hype the privatization of water in the Global South. The poor countries, especially from Africa, are encouraged to enhance their water infrastructures and improve their water supply systems through the privatization of water. However, water corporations are more willing to get involved in hydromegaprojects like dams and irrigation networks whose high revenues can easily pay off the World Bank's loans, whereas an investment in the projects that supply drinking water to the poor neighborhoods is not appealing to those corporations (Sivaraman, 2015). As a result, the Global North reaps a double benefit of the privatization of water in the Global South, by selling their water technologies and engineering services to those privatized water sectors and also by turning the Global South into an agricultural organism that metabolizes its precious water resources into cheap foods for export to the Global North. Piper (2014) sheds light on this global

water populism by discovering that the World Water Council, the organizer of World Water Forum, has three founding members, one of whom is the former president of the French giant company of Suez, and Suez is usually among the main private sponsors of the World Water Forum.

However, our definition of water populism encompasses the ideological structure of a polity, as the first ring of a causal chain that leads to water crisis. In this sense, water populism refers to a set of political campaigns and economic programs orchestrated to quieten the public worries about water crisis or deflect any blame off ideology and on to secondary causes.

This article focuses on Iran as an example, where water populism has brought people to the brink of hydraulic collapse (Khaneiki, 2020). Iran's long-term mean annual precipitation amounts to 225 mm, with a minimum of around 50 mm in its center and a maximum of 1,500 mm per year in its northern coastal areas (Saemian et al., 2022). Despite the fact that Iran is among the world's water-poor countries, it could have developed a good level of adaptation to its available water sources until the beginning of the 1980s (Khaneiki et al., 2022; Semsar Yazdi et al., 2005). However, over the past four decades, almost all the rivers were dammed, though there was not always a positive correlation between the number of new dams and the amount of harvested water (Figure 1). As a result, most inland lakes were on the verge of desiccation or already dried up, and 75% of the country's groundwater reserves were used up (Mirzavand & Bagheri, 2020; Shahi, 2019). The groundwater depletion started in the early 1980s after Iran's revolution, and it has steadily declined since then (Figure 2) to the point that the aguifers' deficit has now reached 143 billion m³, which has exceeded the country's total renewable water (Islamic Consultative Assembly, 2022). This situation has deteriorated over the past 5 years, which is reflected in an annual drawdown of about 2 m in the water level of the country's 60 main aquifers (Czulda, 2022; Madani, 2014). Iran's declining groundwater can hardly be attributable to climate change according to a new study that points toward human intervention as the major cause (Noori et al., 2023).

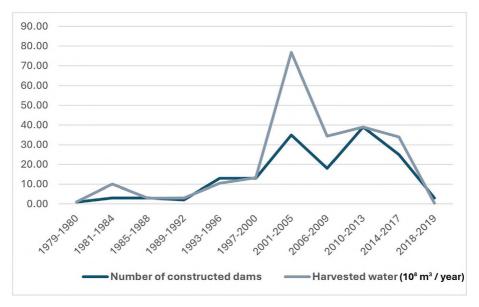


FIGURE 1 The construction of 155 large national dams and the trend of their harvested water from 1979 to 2019 (Iran Water Resources Management Company, 2020).

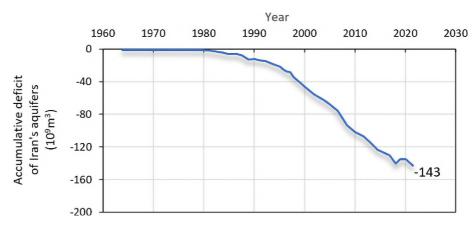


FIGURE 2 Accumulative deficit of Iran's aquifers between 1980 and 2022 (Islamic Consultative Assembly, 2022).

2 | METHOD

This article has deployed an inductive qualitative method to delve into the mechanism and repercussions of water populism. Our data have been gleaned from available textual sources. Our sources fall into two groups: hard copies of documents obtained from the library of University of Nizwa and online articles found in our search in Google Scholar. The search keywords mostly included populism, water policy, Iran water crisis, and ideology. Our keywords were used in multiple Boolean search equations. Our archival research unfolded in three stages: gathering documents, systematic screening, and concept analysis. The first stage included document collection based on a set of search keywords to find as many relevant references as possible. The second stage involved sorting out the collected documents, evaluating their relevance, and classifying them. The third stage was focused on the documents that mostly revolved around the relationship between water management and ideology in Iran. We found 61 relevant documents by sifting through 120 online and offline search results.

3 | A HYBRID IDEOLOGY AND IRAN'S HYDRAULIC MISSION

Ideology is referred to as a system of beliefs and values, which is used as a benchmark for measuring the success and efficiency of all socio-economic programs. In the formative years of the Islamic Republic, its ideology was a fusion of Shia Islam and Marxism (Fadaee, 2022; Khaneiki & Al-Ghafri, 2023), though this ideology later evolved into a different variant inclining to a type of neoliberalism. This merger was rooted in the socio-economic dynamics of Iran during Mohammad Reza Pahlavi's reign from 1941 to 1979.

Although Shia clerics exercised influence on the religious masses in premodern Iran, two economic powerful players—bazaar merchants in urban centers and landowners in rural areas—impeded their advance toward establishing a Shia theocracy through mobilizing their large following. In urban centers, Shia clerical system had a symbiotic relationship with the bazaar merchants who paid religious taxes (khums and zakat), and in return, the clerics used their influence to align the masses with a socio-economic order that perpetuated the merchants'

benefit. In rural areas where around 70% of Iran's population lived, the clerics allied themselves with wealthy landowners whose religious endowments were instrumental in the economic integrity of Shia clerical system. Moreover, the socio-economic hegemony of traditional land-lords buffered the established order from the clerics' ambition of wielding political power. However, Pahlavi's economic reforms like modern monetary and bank systems undermined the merchants' economic power in urban centers. The 1962 land reform also uprooted the landowners and sparked a mass migration to urban areas to the extent that only around 30% of Iran's population remained in villages (Danesh, 1992; Tamassoki et al., 2022). Now, the clerics had direct access to a large religious population in the poor suburbs, a mass of blue-collar workers who were out of their traditional rural context.

Pahlavi's reforms gave rise to a new socio-economic organization where some 85% of the private banking, manufacturing, foreign trade, insurance, and urban construction firms were in the hands of aristocratic families, elder politicians, high-ranking military officers, senior civil servants, rich entrepreneurs, and enterprising feudal lords who survived land reform by turning to agribusiness and urban ventures (Moaddel, 1991, p. 317). This socio-economic organization paved the way for a strategic alliance between Shia Islam and Marxism, mainly based on four ideological commonalities as follows, regardless of their different ultimate goals and conflicting desired political models.

Their first commonality was their similar stances against Western capitalist domination that allegedly begot an imperialistic relationship between the world's rich and poor countries (Dabashi, 2017). Second, they both shared a revolutionary sympathy for the working class that was believed to be commodified and victimized by an exploitative system, though this system was differently called taquet (earthly oppressive power) by the Islamists, and the bourgeoisie by the Marxists (Arghavan, 2020). Third, they both denounced the Pahlavi's modernization as a West-backed campaign to annex Iran to the realm of consumerism with all its corrupt habits and values, which is well reflected in the book "Westoxification" by Al-e Ahmad, an Islamist-Marxist author (Kasraie & Asgharpoor, 2020). And fourth, they both longed for a messianic utopia where the people would relish a genuine form of social justice, though they could potentially end up in disagreement over the realization of this dream. The Islamists' utopia was a unitarian society (jame'a towhīdī) under the divine sovereignty of the God's representative, whereas the Marxists' was a classless society ruled by the proletariat, as the last stage of a dialectical materialistic history (Purabbas, 2019). Nonetheless, such theoretical differences did not detract from their cooperation to topple the bureaucratic institutions of the Pahlavi's regime in order to reorganize the relations of production in favor of the least advantaged (Moaddel, 1995).

Therefore, the clerics who were weaned from their traditional sources took advantage of this hybrid ideology to orchestrate a revolution that promised to create a classless society where even water and electricity would be free (Parsa, 2011). Iran's 1979 revolution resurrected the Islamic concept of anfāl, which determined the trilateral relationship between government, people, and water. Anfāl is a Quranic concept that only alludes to the spoils of war (ghanīma) belonging to God and his Apostle (Mottahedeh, 2012). However, the Shia interpretation generalizes anfāl to whatever fall into the hands of Muslim conquerors including natural resources and even intangible properties such as water rights (Qazanfari & Khodabandloo, 2022). Therefore, Iran's water resources came into the possession of the Islamic leader who had the absolute discretion to allocate water resources (Meshkini, 1999). Anfāl was incorporated into Iran's ideology in the shape of the country's new legislation. Thus, a special water law, passed in 1982, officially assigned the government a hydraulic mission that helped the Islamic government to ride out the consequences of its ideology (Water Just Distribution Law, 1982).

This hydraulic mission that re-shaped Iran's water resources unfolded in three stages: dam construction, inter-basin water transfer, and seawater desalination. The first stage, between 1979 and 1999, was marked by a campaign to build massive dams across the country as a precursor to independence and self-sufficiency in food production. As a result, hundreds of small and large dams mushroomed across the basins, which displaced about 2 million people and triggered water conflicts between the rivers' upstream and downstream (Abbasi & Abbasi, 2020; Noori Sani et al., 2019). This stage also encompasses the presidency of Rafsanjani (1989–1997) after the Iran-Iraq war. His presidency was called "the era of reconstruction" when the government drifted away from its leftist legacy, which manifested itself in the pseudo-privatization of water (Ansari, 2007).

The second stage is characterized by the inter-basin water transfer projects carried out mostly between 1999 and 2018, with 17 major pipelines that transfer around 2.5 billion m³ of water per year mostly from Iran's western provinces to its center (Fazelpoor et al., 2022), where a geopolitical safety and a Shia Persian population with more loyalty to the ruling ideology lends itself to developing such strategic high-water-demand industries as copper and iron foundries. A survey, conducted by Ranjbar in the basin of Lake Urmia, shows that the majority of respondents believe that the desiccation of this lake is the direct result of the government's policy, which ignores the non-Persian population of the Urmia basin and gives its attention and support to such regions as Isfahan (Ranjbar, 2023, p. 1224).

The third stage of Iran's hydraulic mission started almost in 2018 when the previous stages backfired. The first megaproject of this kind is a 975-km pipeline that transfers water from a desalination plant on the southern coasts to some metal foundries in central Iran (Rahimizadeh, 2018).

4 | POPULISM AND WATER CRISIS

All the approaches to Iran's water crisis fall into three main groups: denial, projection (blaming others), and securitization, which together constitute water populism. Denial approach is mostly taken by the top level of Iran's power pyramid, which tends to contend that water crisis is another conspiracy hatched by the global imperialism that attempts to disappoint the people by catastrophizing about Iran's situation. Denial serves as a defense mechanism to maintain the desired political system by convincing the public that under the current leadership things are inevitably in idyllic conditions. For example, Iran's supreme leader seems to have not recognized water crisis as a genuine concern, by saying that the main concerns of humanity are ethics and spirituality rather than water crisis (Khamenei, 2011, p. 2). A concept analysis of the Iranian leader's speeches delivered between 1999 and 2020 shows that he has raised the subject of water 132 times as a peripheral issue that can easily be resolved through appropriate measures, while emphasizing the spiritual aspects of water (Yazdi & Medadi, 2022).

Projection approach is mostly adopted by the middle levels of Iran's polity, which are expected to suggest a more practical solution. This approach helps them to evade the question about the real cause of water crisis, by attributing it to a wide range of factors many of which are themselves the product of water crisis. Apart from a few theocrats that put the crisis down only to God's anger over unveiled women (Hosseini, 2023), a set of mostly physical and managerial factors are highlighted as the culprit, ranging from water mismanagement to drought, agricultural policies, inefficient irrigation, population growth, urbanization, migration, and consumption patterns (Madani et al., 2016). In the current paradigm, Iran's hydrological situation

is called water bankruptcy that is believed to be caused by a mismanaged imbalance between water demand and supply (Yazdian et al., 2021). An interview with a member of the Parliament Internal Affairs Commission reveals that the blame is even put on the parliament members who allegedly transfer high-water-demand industries to their arid electoral districts (Abutorabi, 2022). This projection approach sometimes hits the international headlines like the case of Kalpush dam that caused a devastating landslide and destroyed 300 houses in a nearby village. Despite all the scientific evidence that the dam's impact on the local water table was responsible for that landslide (Vassileva et al., 2024), the government still insists on blaming heavy rainfalls (Ravilious, 2024).

In the projection approach, hydrological hazards and shortcomings are foregrounded as the reason of water bankruptcy in the belief that better designed hydro-infrastructures or managerial schemes can totally undo the ongoing hydraulic catastrophe. This approach is reflected in the country's water programs shown in Table 1. These programs started in 1989 when the first round of Iran's hydraulic mission ecologically misfired, and their frequency increased through 2022. Some of these programs, like water supply jihad, serve to dampen hydro-social tensions as a political sedative by supplying at least drinking water mostly to the western provinces whose rivers have heavily been dammed and transferred. Another example is the Urmia Lake Restoration Program, in response to the desiccation of Lake Urmia, which was implemented by building a pipeline to transfer water from the Zab Basin to Lake Urmia with a budget of 1 billion USD. At least 86% of the lake area shrinkage is associated with 55 small and large dams constructed in the lake basin from 1979 to 2017 to supply water to the farmlands that expanded by

TABLE 1 Iran's water programs from 1989 to 2022 (Islami & Rahimi, 2019; Khalili et al., 2008; Khodadadi et al., 2022).

Year	Program title	Purpose
1989	Cloud seeding	For weather modification by dispersing silver iodide into the air.
1997	Modern irrigation systems	For reducing the amount of water used in irrigation.
2000	Land use planning	For introducing a water-efficient agriculture in line with food security policy.
2013	Urmia Lake restoration program	For rehabilitating the shrinking lake of Urmia.
2014	Groundwater restoration and moderation	For controlling groundwater consumptions, preserving aquifers, and raising public awareness.
2014	Tropical project	For managing surface streams and supplying water to the irrigation and drinking sectors in Iran's western regions.
2016	Fossil water resources	For extracting and managing fossil water reserves.
2017	Adaptation to water scarcity	For enhancing the country's adaptation to water shortage through using national and Islamic capacities.
2019	Flood management project	For managing seasonal runoffs.
2021	Water supply Jihad	For supplying water to 10,000 water-stressed villages.
2022	Water and soil infrastructures	For developing water related projects in the province of Northern Khorasan.
2022	Cropping pattern modification	For enhancing irrigation efficiency by modifying cropping patterns.

400% in an attempt to ensure self-sufficiency in food production (Parsinejad et al., 2022). Nonetheless, a considerable portion of the water transferred from the Zab Basin is allocated to the same farmlands rather than the lake (Ebrahimi et al., 2020, p. 185).

Therefore, these water programs fatten some parastatal companies that appropriate a large chunk of the country's budget to carry out such hydraulic projects, rather than alleviate water crisis (Rizvi, 2012). The projection approach leads to the prescription of water programs, and these programs in turn bring about a network of corrupt political-economic cronies, which is dubbed "water mafia" that uses water resources to strengthen their political foothold and fill their own coffers (Shokri, 2019, p. 56).

Such water programs are hyped in the framework of resistance economy, an ideological term that refers to a package of initiatives for the purpose of deflecting international sanctions away from the people (Gönüllü, 2018). The sanctions have had a devastating impact on Iran's economy, reflected in double-digit inflation and a deep recession, such that Iran's GDP growth fell from 5.8% in 2010 to -7.4% in 2012 (Ghasseminejad & Jahan-Parvar, 2021, p. 604). Under these conditions, the most important initiative is self-sufficiency that is believed to thwart the West's plot to make Iran retreat from its revolutionary values (Oxford Analytica, 2019). Self-sufficiency is behind a dramatic increase in wheat production after 2011 when resistance economy was announced as the government's motto (Fatahi Ardakani et al., 2021). According to FAO (2022), Iran's wheat production increased by 44% in 2022 compared to the previous year, in the face of Iran's water shortage.

And eventually, the securitization of water is the third approach, systematically adopted to prevent the public conscience from questioning the two previous approaches: denial and projection. The securitization of environmental issues like water scarcity is common in the world's political systems, though a successful securitization process may be compromised by the other economic or political priorities (Buzan & Wæver, 2009, p. 272). What distinguishes Iran from its secular counterparts is that water is not securitized to restrain those who jeopardize the nation's security by overexploiting the water resources, but water is securitized to deflect criticism from an ideological governance that is the driving force behind the country's water bankruptcy. Therefore, the securitization of water is predicated on the assumption that those who challenge the state water policy are the pawns of the West and should not be tolerated. Thus, for example, in 2000, a demonstration against water shortage in the southern city of Abadan, Khuzestan province, was harshly suppressed with some casualties (Badiee Azandahi et al., 2022, p. 154).

In 2021, the same social discontent over water mismanagement again erupted in the shape of a series of street protests in Khuzestan province and then quickly spread to many other provinces across the country. Although that protest, known as "the uprising of the thirsty," began with a social demand for better water management, its slogans mostly targeted the entirety of Iran's polity (Malm, 2023, p. 5; Czulda, 2022, p. 120). This example shows that denial and projection approaches have failed to convince the public conscience, leading to a condition that necessitates the securitization of water. This aspect of populism is manifested in a wave of detentions of environmentalists and stricter censorship over the media that cover water news (Fathollah-Nejad, 2020).

5 | CONCLUSION

• Iran's ideology is constituted by four main tenets: establishment of Islamic ummah (nation), guardianship of the Islamic jurist, anti-Westernism, and universality of the Islamic

Revolution (Gonabad et al., 2017). This ideology challenges the western powers for their different values on the one hand and puts the region's countries in the defensive position for fear of Iran's revolutionary expansionism on the other. This ideological antagonism limits Iran's commercial connections with the world's main producers and subjects it to international sanctions in a way that Iran resorts to resistance economy whose prescribed self-sufficiency puts more pressure on its water resources.

- This multilateral antagonism reorganizes Iran's economic landscape in different ways such
 as developing center-oriented industries. Iran's geopolitical concerns entail concentrating its
 high-water-demand industries in the central provinces whose water resources barely suffice
 for their own people unless the government embarks on a hydraulic mission to transfer water
 from the rivers of western Iran. Nonetheless, this hydraulic mission only adds to Iran's
 water crisis that is manifested in territorial conflicts, ecological degradation, migration, and
 poverty.
- Such an ideological obsession wreaks havoc on the nation's water resources. The resultant water crisis is either denied as a malicious plot to worry the people, or it is reduced to physical-managerial issues that can be resolved by setting out a program, appointing a manager, or electing a new president. This denial-projection technique sets the stage for the hydraulic mission as a remedy to all those issues, and the hydraulic mission in turn fuels Iran's water crisis. However, the growing water crisis inflames social tensions across the country where the government's denial and projection are viewed with great skepticism, driving the government into the securitization of water. This vicious cycle is encapsulated in "water populism" that obscures the fact that the water crisis is mostly the result of ideology and its associated power relations. Therefore, a structural reform in Iran's ideological governance is the key to its sustainable water management.

ACKNOWLEDGMENTS

We acknowledge the University of Augsburg in Germany that hosted the first author for a research stay in the summer of 2023, through a grant within the framework of the Guest Lecturer Program of the Bavarian State Ministry for Science and Art.

CONFLICT OF INTEREST STATEMENT

No potential conflict of interest was reported by the authors.

DATA AVAILABILITY STATEMENT

The data that support the findings of this research are available on request from the authors.

ORCID

Majid Labbaf Khaneiki https://orcid.org/0000-0001-6080-1537

REFERENCES

Abbasi, N., & Abbasi, F. (2020). Water supply and consumption in Iran. Ministry of Agriculture.

Abutorabi, A. (2022). The parliament members' populism impedes the solving of water crisis. Payamema Newspaper, 2344, at https://payamema.ir/payam/articlerelation/70121

Ansari, A. M. (2007). Chapter one: The Rafsanjani and Khatami presidencies. *The Adelphi Papers*, 47(393), 11–22. https://doi.org/10.1080/05679320701868128

Arghavan, M. (2020). Two sides of the same coin of populism? Islamic Marxism and socialist Islamism during the Iranian 1979 revolution. *Kairos: A Journal of Critical Symposium*, 5(1), 101–119.

- Badiee Azandahi, M., Pishgahifard, Z., & Najafi Nakhjuanlu, V. (2022). Securitization of inland waters and its impact on national security of Iran. *Research Political Geography Quarterly*, 7(4), 135–158.
- Brubaker, R. (2017). Why populism? Theory and Society, 46, 357-385. https://doi.org/10.1007/s11186-017-9301-7
- Buzan, B., & Wæver, O. (2009). Macrosecuritisation and security constellations: Reconsidering scale in securitisation theory. *Review of International Studies*, 35(2), 253–276. https://doi.org/10.1017/S0260210509008511
- Czulda, R. (2022). Iran's water security: An emerging challenge. *Middle East Policy*, 29(2), 113–123. https://doi.org/10.1111/mepo.12626
- Dabashi, H. (2017). Theology of discontent: The ideological foundation of the Islamic revolution in Iran. Routledge. https://doi.org/10.4324/9781315135519
- Danesh, A. H. (1992). Land reform, state policy, and social change in Iran. Urban Anthropology and Studies of Cultural Systems and World Economic Development, 21(2), 153–179.
- Ebrahimi, M., Abdi, A., & Sasanpour, F. (2020). Future research on the consequences of water transfer of Zab Basin to Lake Urmia. *National Studies*, 24(2), 173–189.
- Fadaee, S. (2022). Marxism, Islam and the Iranian revolution. In *Marxism, religion and emancipatory politics* (pp. 103–120). Springer International Publishing.
- FAO. (2022) Food outlook—Biannual report on global food markets. Rome.
- Fatahi Ardakani, A., Ahmadi, Z., Fehresti-Sani, M., & Neshat, A. (2021). Investigating the factors affecting the self-sufficiency coefficient of Iranian wheat. *Iranian Journal of Agricultural Economics and Development Research*, 52(4), 731–741.
- Fathollah-Nejad, A. (2020). The Islamic Republic of Iran four decades on: The 2017/18 protests amid a triple crisis. Doha, Qatar: Brookings Doha Center, April, 9.
- Fazelpoor, K., Martínez-Fernández, V., Yousefi, S., & García de Jalón, D. (2022). Increased artificiality trend driven by an inter-basin water transfer on the Zayandeh-rud River floodplain in Iran. *Geocarto International*, 37, 1–22. https://doi.org/10.1080/10106049.2022.2076926
- Ghasseminejad, S., & Jahan-Parvar, M. R. (2021). The impact of financial sanctions: The case of Iran. *Journal of Policy Modeling*, 43(3), 601–621. https://doi.org/10.1016/j.jpolmod.2021.03.001
- Gonabad, R. A., Fayaz, E., & Naderi, A. (2017). Review of discourse components of Islamic Republic of Iran in the Middle East. *Journal of Politics and Law*, 10(15), 105–115. https://doi.org/10.5539/jpl.v10n5p105
- Gönüllü, G. (2018). Approach of resistance economy to economy. Current Debates in Public Finance Public Administration & Environmental Studies, 13, 360.
- Hosseini, M. (2023). Not wearing hijab is the reason of low rainfall. Eghtesad News, 548366, at https://www.eghtesadnews.com
- Iran Water Resources Management Company. (2020). Iran's water statistical yearbook. Ministry of Energy.
- Islami, R., & Rahimi, A. (2019). Policymaking and water crisis in Iran. Macro and Strategic Policies, 7(27), 410–435. https://doi.org/10.32598/JMSP.7.3.5
- Islamic Consultative Assembly. (2022). Annual Report No. 25018465. Tehran: Mailis Research Center.
- Kasraie, M., & Asgharpoor, R. (2020). Westoxification constructions; Jalal Al-e-Ahmad articulations. *Sociological Cultural Studies*, 11(1), 57–87.
- Khalili, M., Seidhassani, M., Golkar, F., & Khatibi, V. (2008). Results of cloud seeding operations for precipitation enhancement in Iran during 1999–2007 (p. 22). Planned and Inadvertent Weather Modification/Weather Modification Association.
- Khamenei, S. A. (2011). Speech at the meeting with an elite group of women. The Office of Supreme Leader.
- Khaneiki, M. L. (2020). Hydro-political organization in Iranian history. Water History, 12(4), 403–425. https://doi.org/10.1007/s12685-020-00261-5
- Khaneiki, M. L., & Al-Ghafri, A. S. (2023). Water cooperation and ideology in local communities. *Blue Papers*, 2(1), 144–153. https://doi.org/10.58981/bluepapers.2023.1.14
- Khaneiki, M. L., Al-Ghafri, A. S., Klöve, B., & Haghighi, A. T. (2022). Sustainability and virtual water: The lessons of history. *Geography and Sustainability*, 3(4), 358–365. https://doi.org/10.1016/j.geosus.2022.11.005
- Khodadadi, M., Naseri, H. R., & Nikpeyman, Y. (2022). The assessment of groundwater restoration and moderation project in Shahriar plain with a focus on smart water meters. *Water and Sustainable Development*, 9(3), 49–56.

- Madani, K. (2014). Water management in Iran: What is causing the looming crisis? *Environmental Studies and Sciences*, 4, 315–328. https://doi.org/10.1007/s13412-014-0182-z
- Madani, K., AghaKouchak, A., & Mirchi, A. (2016). Iran's socio-economic drought: Challenges of a water-bankrupt nation. *Iranian Studies*, 49(6), 997–1016. https://doi.org/10.1080/00210862.2016.1259286
- Malm, A. (2023). The dialectics of disaster: Considerations on hazards and vulnerability in the age of climate breakdown, with a brief case study of Khuzestan. *Jàmbá: Journal of Disaster Risk Studies*, 15(1), 9. https://doi.org/10.4102/jamba.v15i1.1588
- Meshkini, M. A. (1999). The terminology of Islamic jurisprudence. Al-Hadi.
- Mirzavand, M., & Bagheri, R. (2020). The water crisis in Iran: Development or destruction? *World Water Policy*, 6(1), 89–97. https://doi.org/10.1002/wwp2.12023
- Moaddel, M. (1991). Class struggle in post-revolutionary Iran. *International Journal of Middle East Studies*, 23(3), 317–343. https://doi.org/10.1017/S0020743800056324
- Moaddel, M. (1995). Ideology as episodic discourse: The case of the Iranian revolution. In S. M. Lyman (Ed.), Social movements: Critiques, concepts, case-studies (pp. 234–290). NYU Press. https://doi.org/10.1007/978-1-349-23747-0 11
- Mottahedeh, R. P. (2012). Qur'ānic commentary on the verse of khums (al-Anfāl VIII: 41). In K. Morimoto (Ed.), Sayyids and sharifs in Muslim societies (pp. 37–48). Routledge.
- Müller, J. W. (2017). What is populism? Penguin.
- Noori, R., Maghrebi, M., Jessen, S., Bateni, S. M., Heggy, E., Javadi, S., & AghaKouchak, A. (2023). Decline in Iran's groundwater recharge. *Nature Communications*, 14(1), 6674. https://doi.org/10.1038/s41467-023-42411-2
- Nourisani, A., Mohseni, R. A., & Koosheshi, M. (2019). Social and cultural impacts of dam reservoir releasing management. *Social Sciences*, 26(87), 179–215.
- Oxford Analytica. (2019). Water crises in Iran will recur and worsen. Emerald Expert Briefings, (oxan-db).
- Parsa, M. (2011). Ideology and political action in the Iranian revolution. *Comparative Studies of South Asia, Africa and the Middle East*, 31(1), 53–68. https://doi.org/10.1215/1089201X-2010-052
- Parsinejad, M., Rosenberg, D. E., Ghale, Y. A. G., Khazaei, B., Null, S. E., Raja, O., & Wurtsbaugh, W. A. (2022). 40-years of Lake Urmia restoration research: Review, synthesis and next steps. Science of the Total Environment, 832, 155055. https://doi.org/10.1016/j.scitotenv.2022.155055
- Piper, K. (2014). The price of thirst: Global water inequality and the coming chaos. U of Minnesota Press. https://doi.org/10.5749/minnesota/9780816695423.001.0001
- Purabbas, M. A. (2019). Critical study and survey of Dr. Shariati's viewpoint on social monotheism. Andishe-Novin-e-Dini, 15(59), 103–116.
- Qazanfari, A., & Khodabandloo, M. (2022). A comparative study of the word "Ghanimtum" in verse 41 of Surah Anfal from the perspective of Shiite and Sunni narrators and commentators. *Biannual Journal Quran and Religious Enlightenment*, 2(2), 53–65.
- Rahimizadeh, M. R. (2018). Effects of interbasin water transfer projects on Iran's water resources. *Strategic Research Journal of Agricultural Sciences and Natural Resources*, 3(1), 27–42.
- Ranjbar, A. M. (2023). The greening of human rights in Iran: Lake Orumiyeh, human rights, and environmental justice. *Environment and Planning E: Nature and Space*, 6(2), 1214–1228.
- Ravilious, K. (2024, March 27). Scientists link 2019 Iranian landslide to building of dam. The Guardian. Retrieved March 29, 2024, from https://www.theguardian.com/science/2024/mar/27/scientists-link-2019-iranian-landslide-to-building-of-dam
- Rizvi, M. M. A. (2012). Evaluating the political and economic role of the IRGC. *Strategic Analysis*, 36(4), 584–596. https://doi.org/10.1080/09700161.2012.689528
- Saemian, P., Tourian, M. J., AghaKouchak, A., Madani, K., & Sneeuw, N. (2022). How much water did Iran lose over the last two decades? *Hydrology: Regional Studies*, 41, 101095.
- Semsar Yazdi, A. A., Labbaf Khaneiki, M., & Dehghan, M. B. (2005). A survey on the Qanats of bam from technical and engineering point of view. UNESCO Tehran Cluster Office, ICQHS.
- Shahi, A. (2019). Drought: The Achilles heel of the Islamic Republic of Iran. *Asian Affairs*, 50(1), 18–39. https://doi.org/10.1080/03068374.2019.1567100
- Shokri, U. (2019). Thirsty borders: Iran's water crisis and security challenges with its neighbors. *Journal for Iranian Studies*, 7(18), 47.

- Sivaraman, M. R. (2015). The price of thirst: Global water inequality and the coming chaos. *International Journal of Environmental Studies*, 72(2), 360–364. https://doi.org/10.1080/00207233.2015.1010877
- Swyngedouw, E. (2022). The unbearable lightness of climate populism. *Environmental Politics*, 31(5), 904–925. https://doi.org/10.1080/09644016.2022.2090636
- Tamassoki, E., Mohammadi Kangarani, H., Ashtarian, K., Arashk, H., & Naderi, F. (2022). Analysis of land reforms law based on Kingdon's theory of multiple streams. *Strategic Studies of Public Policy*, *12*(43), 130–162.
- Vassileva, M., Motagh, M., Roessner, S., & Xia, Z. (2024). A multi-sensor remote sensing approach for understanding slow-moving landslide reactivation: A case study from North Central Iran following reservoir impoundment and extreme precipitations (No. EGU24-13222). Copernicus Meetings.
- Water Just Distribution Law. (1982). Tehran: Islamic consultative assembly.
- Yazdi, M., & Medadi, M. (2022). Environment in the Ayatollah Khamenei's thoughts, the supreme leader of Iran. Environmental Education and Sustainable Development, 10(2), 9–18.
- Yazdian, M., Rakhshandehroo, G., Nikoo, M. R., Mooselu, M. G., Gandomi, A. H., & Honar, T. (2021). Ground-water sustainability: Developing a non-cooperative optimal management scenario in shared groundwater resources under water bankruptcy conditions. *Environmental Management*, 292, 112807. https://doi.org/10.1016/j.jenyman.2021.112807
- Zetland, D. (2014). Rational waste: The political economy of desalination. Available at SSRN 2498938, file:///C:/Users/Admin/Downloads/SSRN-id2498938.pdf.

How to cite this article: Khaneiki, M. L., Schmidt, M., & Al-Ghafri, A. S. (2024). Water populism and the Iranians' collective adipsia. *World Water Policy*, *10*(4), 1082–1093. https://doi.org/10.1002/wwp2.12195