THE RIGHT TO WATER AND CLIMATE CHANGE

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THE ARAB WATCH REPORT ON ECONOMIC AND SOCIAL RIGHTS

A REGIONAL POLITICAL ECOLOGY LENS ON THE RIGHT TO WATER IN THE ARAB WORLD

THE RIGHT TO WATER IN THE ARAB REGION: CLIMATE CHANGE CHALLENGES AND CONSIDERATIONS

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Arab NGO Network for Development
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This report is published as part of the Arab NGO Network for Development's Arab Watch Report on Economic and Social Rights (AWR) series. The AWR is a periodic publication by the Network and each edition focuses on a specific right and on the national, regional and international policies and factors that lead to its violation. The AWR is developed through a participatory process which brings together relevant stakeholders, including civil society, experts in the field, academics, and representatives from the government in each of the countries represented in the report, as a means of increasing ownership among them and ensuring its localization and relevance to the context.

The seventh edition of the Arab Watch Report focuses on the right to water. It was developed to provide a comprehensive and critical analysis of the status of this right across the region, particularly in the context of climate change and its growing impacts. The information and analyses presented aim to serve as a platform for advocacy toward the realization of this fundamental right for all.

The views expressed in this publication are solely those of the author and do not necessarily reflect the positions of the Arab NGO Network for Development (ANND), Brot für die Welt, or Norwegian People's Aid.

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INTRODUCTION

Access to safe water and adequate sanitation constitutes one of the most fundamental requirements for human dignity, public health, and decent socio-economic conditions. Yet across the Arab region, this access remains profoundly unequal, structurally constrained, and increasingly threatened. The Arab Watch Report 2025 examines how water use, misuse, and imposed policies are affecting societies across the region, with particular attention to marginalized groups. It traces the historical evolution of water allocation in different countries and identifies common challenges to realizing this vital right. Through thematic analyses, national reports, and case studies, the AWR evaluates national water issues from a political economy perspective, critically examining neoliberal policies and their impacts on vulnerable communities and the environment. Rather than accepting the terms of technocratic water management, the report advances a vision of water as a common resource, publicly, democratically, and sovereignly governed and equitably distributed. The work is aimed at social movements, civil society organizations, local stakeholders, and international bodies to advocate for inclusive, socially just water policies and nature-based solutions in the region.

The report rejects the mainstream reductionist view that frames the water crisis as a technical, administrative, or natural scarcity problem. Instead, it demonstrates how decision-making is driven by international capital hegemony and systematically alienated from citizens, and, in the case of Palestine, subject to complete domination. From the 2003 war on Iraq to the wars in Syria and Libya since 2011, Yemen since 2014, Gaza and Lebanon since 2023, Sudan through 2024, and Iran in 2026, alongside the demonstrated fragility of desalination dependence in Gulf states, water bears the imprint of social injustice.

Wars, climate change, economic crises, agricultural intensification, urbanization, industrial and extractive pollution, and decades of intensive exploitation of land and water have all produced a multidimensional water crisis. Its burden falls most heavily on the poor and marginalized: rural communities, peasants, fishermen, migrant workers, refugees, women and children, and minorities. Given its far-reaching consequences on health, livelihoods, food security, and overall socio-economic conditions, identifying the political and economic drivers of this crisis at the national, regional, and international levels is of urgent importance.

An estimated 50 million people across the Arab region lack access to safe drinking water, while 154 million lack safe sanitation. These figures mask severe disparities between rural and urban populations and across conflict-affected territories (ESCWA, 2024). Rural residents remain the most underserved, with access rates substan-

tially below urban averages. This gap deepens sharply in conflict zones, where water infrastructure has been systematically damaged or destroyed. The Arab region is among the most unequal globally (ESCWA, 2022). Alongside an extreme concentration of wealth, Arab societies continue to face widespread authoritarianism, which cannot be separated from global financial capital. This is reinforced by the expanding influence of international and regional financial institutions since the adoption of Dublin Principle 4 in 1992, which entrenched the treatment of water as an economic commodity, promoting privatization and the divestment of public assets.

This chapter opens with the regional context and the accelerating threat of climate change before tracing the long history of water rights and development paradigms in the Arab world, from Islamic and Ottoman foundations through colonial concessions, Cold War megaprojects, and the neoliberal privatization wave. It then examines governance failures, international accountability, and the right to water under SDG 6. The chapter further develops a political ecology lens on water, mapping the intersecting forces of power, dispossession, and struggles over the commons that shape water access across the region. A comparative analysis synthesizes findings across fifteen national contexts, followed by a concluding section that advances recommendations for transformative change toward a post-neoliberal water model that reclaims water as a common resource.

02

WATER AND CLIMATE CHANGE: AN ACCELERATING CRISIS IN AN UNEQUAL REGION

Climate change has been selected as a sub-theme for the Arab Watch Report 2025 given its direct and deepening interlinkages with the water crisis across the region. It is likely to have its greatest impact on the poor and vulnerable, who are least able to cope with its effects, including increased water stress (ESCWA, 2022; Sowers, Vengosh and Weinthal, 2011). It intensifies and compounds existing injustices, from the dispossession of small farmers and rural communities to the collapse of public infrastructure, the commodification of a vital resource, and the systematic exclusion of the poor from safe access to water. Climate change is also not gender-neutral. Across the Arab region, women and girls bear a disproportionate share of its burden, above all through the time, labor, and physical risk involved in water collection as sources become more distant and unreliable. In Yemen, recurring droughts have forced girls out of school to shoulder growing household water responsibilities. As climate stress intensifies, these gendered burdens deepen structural inequalities and constrain women's living conditions (Sultana, 2022a; UNICEF, 2023).

It is important to acknowledge that the capacity to face and adapt to climate change challenges varies greatly both between and within countries in the Arab region. While Yemen and Sudan are among the poorest and most climate-vulnerable countries in the world, their Gulf neighbors are among the richest globally, deriving vast profits from fossil fuel industries that are directly driving the climate crisis. In terms of water supply, around 55 percent of the world's desalination brine is produced by Saudi Arabia (22%), the UAE (20.2%), Kuwait (6.6%), and Qatar (5.8%), and discharged into a Gulf already among the saltiest and warmest seas on earth. This poses serious threats to marine ecosystems and the long-term viability of desalination itself (Jones et al., 2019).

Climate change studies consistently attribute the increased occurrence and severity of heatwaves, droughts, and floods across the region to global warming. The IPCC Sixth Assessment Report confirms that the region is experiencing rising temperatures, decreased and increasingly variable rainfall, and an escalating frequency and severity of droughts, dust storms, storm surges, and floods (IPCC, 2023). In 2024 alone, extreme events affected nearly 3.8 million people and caused over 300 reported deaths. Recorded climate-related disasters in the Arab region increased by 83 percent between 1980–1999 and 2000–

2019 (WMO, 2025). The Arab world is warming at nearly twice the global average, with 2024 confirmed as the hottest year on record for the region (WMO, 2025). In parts of Iraq, temperatures exceeded 50 degrees Celsius for up to twelve consecutive days. Morocco, Algeria, and Tunisia endured six consecutive failed rainy seasons. Groundwater depletion is already occurring at high rates across the Arabian Peninsula and North Africa, accelerating the desertification of oases and irrigation lands and imperiling livelihoods (IPCC, 2023).

Climate justice holds that the climate crisis is a moral and political problem rooted in historically unequal relationships between those most responsible for emissions and those most exposed to their consequences (Shue, 2014; Sultana, 2022a). The Arab region accounts for only 5 to 7 percent of global greenhouse gas emissions from its own territories, yet hosts some of the most climate-vulnerable populations in the world. At COP27 in Sharm el-Sheikh and COP28 in Dubai, the establishment of a loss and damage fund was secured only after sustained pressure from vulnerable nations of the Global South, and it remains underfunded. Confronting the water crisis in the Arab region therefore requires addressing the climate crisis not as a natural hazard to be managed through technical fixes, but as the culminating expression of a political economy of fossil capital, externally driven development, and entrenched inequality rooted in colonial histories and persisting into the present (Sultana, 2022b; Hamouchene and Sandwell, 2023). It is to this longer history of water rights that the following section turns.

03

A LONG HISTORY OF WATER RIGHTS IN THE ARAB WORLD

The Middle East and North Africa region is where the first human societies learned to organize themselves around water, from the irrigation canals of Mesopotamia to the flood regimes of the Nile. The contemporary water crisis in the region is difficult to understand without tracing the successive legal and political regimes that have governed access to this resource from the Ottoman, colonial, and postcolonial periods to the neoliberal era. None of these regimes fully replaced what came before; rather, each layered new institutions, entitlements, and power arrangements onto existing ones. The result is a sedimentary accumulation of overlapping and often contradictory legal frameworks, a form of legal pluralism that consistently serves local elites and corporate interests.

WATER RIGHTS: FROM OTTOMAN TANZIMAT TO COLONIAL LAWS

Through the jurisprudence of its different doctrines, Islam views water as a gift from God, recognizing the right to quench thirst and water livestock (haqq al-shifa) and the right to irrigate (haqq al-shirb) as unconditional rights. While Islam prohibits the sale of water, the scope of water rights varies across doctrines. All have established norms, sometimes backed by fatwas, for sharing rights of passage to use a well, rules for irrigating from common sources, protection zones (haram) around rivers and wells, and rotational arrangements for sharing canal maintenance costs. As Caponera (1954) documented across the region, and as Faruqui, Biswas, and Bino (2001) elaborated, these were not abstract theological principles but functional legal frameworks governing the daily management of canals, wells, and springs. They produced a rich jurisprudence on upstream and downstream disputes, obligations of well-owners toward travelers, and collective responsibilities for maintaining shared waterways. Two broad categories of entitlement emerged. Mubah designated sovereign waters, including seas, large rivers, lakes, and groundwater, freely accessible to all. Mulk denoted usage rights over sources such as canals and wells, along with usufruct rights (haqq al-intifa') that could be inherited or sold with the land.

Starting in the mid-nineteenth century, the Ottoman administration implemented Tanzimat reforms, while North Africa came under direct European colonial rule beginning with Algeria's conquest by France in 1830. In the Levant, two reforms significantly transformed water governance: the Defter Khane land registration of 1858, which began recording water entitlements

alongside land property deeds, and the Mecelle civil code, implemented in 1877, which codified water rights. The Mecelle defined public waters, prohibited private ownership of groundwater while permitting its use so long as the source was not depleted, and established protection zones around wells, pollution regulations, and procedures for maintaining waterways. It represented an attempt to codify Hanafi jurisprudence in a European code-based format. These reforms were partly driven by pressure from European imperial creditors. As Mundy and Smith (2007) have shown for Ottoman Syria, the requirement to formally register land titles enabled merchants and administrators to appropriate vast tracts of communally held land, dispossessing peasant communities. Consequently, water rights attached to these lands followed the same trajectory, becoming concentrated in the hands of a few zuama families.

Colonial and mandate powers added their own legal layer in the first half of the twentieth century. Mandate authorities enacted laws to reorganize what they considered archaic and incompatible systems, aligning them with their vision of modernity. This transition was facilitated by the fact that both the Mecelle and European laws, particularly French law, drew on the Napoleonic Code, reinforcing the recognition of acquired rights. Another model of privatization also emerged through private concessions of public utilities. European powers introduced private urban water concessions, such as the Beirut Waterworks Company Limited (1870), La Société des Eaux du Caire (1865), and concessions in Tunis, Bizerte, Sousse, and Monastir. This model began in the late nineteenth century, continued through the interwar mandate period, and ended during the wave of nationalizations that followed independence. This history underscores that water privatization is not new to the region. What the colonial period introduced was a fundamental reorientation of water infrastructure from serving local needs to facilitating colonial extraction, export agriculture, and the provisioning of settler populations. Davis (2007) has documented how French colonial water policy in North Africa privileged settler agriculture at the expense of indigenous communities. Trottier (1999) traces how British Mandate water law in Palestine laid the legal foundations later exploited by Israeli military orders to dispossess Palestinian communities of their water resources.

WATER DEVELOPMENT PARADIGM SHIFTS: FROM COLD WAR MEGAPROJECTS TO NEOLIBERAL PRIVATIZATION

After the Second World War, Cold War foreign policies reshaped the water management paradigm. Development aid flowed to water authorities across the Global South. The United States funded large-scale infrastructure to replicate the Tennessee Valley Authority (TVA) model under the slogan "making the desert bloom." Taming a river with a dam became a techno-political credo, symbolizing the power of the ruler, the modernism of his experts, and the sovereignty of the state (Mitchell, 2002). The TVA was a geopolitical instrument as much as a technical model. Sneddon (2015) documents how the U.S. Bureau of Reclamation exported dam-building as Cold War diplomacy, from the Litani River in Lebanon to the Blue Nile in Ethiopia. Lebanon received one of the first IBRD loans to construct the Qaraoun Dam on the Litani (Riachi, 2013). The National Water Carrier in occupied Pales-

tine was also backed by the Bureau of Reclamation. In 1956, the United States and Britain withdrew funding for the Aswan High Dam following Nasser's non-aligned position, prompting the nationalization of the Suez Canal and a geopolitical realignment whose consequences shaped the region for decades (Waterbury, 1979). Syria and Iraq received Soviet assistance to build large reservoirs, contributing to tensions between the two branches of the Ba'ath. In Egypt, Sudan, Syria, and Iraq, dams were accompanied by forms of state capitalism in the cotton sector, echoing ancient hydraulic societies in which rulers assumed the mantle of Pharaohs and Babylonian emperors. As Molle, Mollinga, and Wester (2009) have shown, this paradigm produced self-perpetuating hydraulic bureaucracies – technocratic institutions whose survival depended on continuous infrastructure expansion, regardless of social or ecological consequences. Despite being driven by public investment, these programs tended to benefit large landholdings and privileged urban neighborhoods (Riachi and Martiniello, 2023). Much of the water infrastructure still in use across the region was developed during this era. These projects encoded the priorities of their funders and the sovereignty claims of their builders.

After three decades of state-led development, and beginning in the 1970s, structural adjustment programs and austerity policies promoted by international donors produced a decisive shift toward water privatization. The ideological foundation was crystallized by Dublin Principle 4, adopted in 1992, which entrenched the treatment of water as an economic commodity. While the full text acknowledges "the basic right of all human beings to have access to clean water and sanitation at an affordable price," it was the commodity framing that international financial institutions operationalized (Bakker, 2007). Behind the recognition of the right to water, it was the market that was enforced. This became the basis for a generation of conditional loans: access to development finance was tied to cost-recovery tariffs, private sector participation, and the retreat of public authorities from direct provision. Goldman (2005) traces how World Bank conditions reshaped water policy across the Global South, creating a regime in which governance requirements function as instruments of continued Northern hegemony over Southern resources. From the 1990s onward, international agencies promoted private sector involvement in the Arab region's water sector through management concessions and public-private partnerships. Numerous examples can be found across the region in recent decades. These include the Suez management contract in Amman (1999–2007); the concession granted to Ondeo-Suez over the Tripoli water office in Lebanon in 2005; Suez's role in water provisioning in Casablanca (Lydec) from 1997 to 2022; and the ten-year concession granted to Suez in Tunisia in 2023. In late May 2025, the Egyptian House of Representatives passed the Drinking Water and Wastewater Regulatory Law, a landmark piece of legislation that officially ends the state's monopoly on utility management and opens the sector to long-term concessions. Across the region, a new wave of legislation is being tailored to meet the requirements of international development agencies. These legal shifts are often a mandatory condition for securing the grants and loans essential for stabilizing national balances of payments.

Privatization is the most visible facet of water neoliberalization. It is accompanied by the commodification of water through bottled water. In fact, the region records some of the highest consumption rates of plastic bottles in the world and is char-

acterized by the proliferation of informal, non-piped water provisioning, including water cisterns and unmonitored wells. What this history reveals is a recurring pattern. At each turning point, whether Ottoman reform, colonial concession, Cold War megaproject, or neoliberal restructuring, external actors and domestic elites reshaped the terms of access to water. At each stage, the resulting arrangements concentrated control in the hands of landowners, politicians, and transnational corporations, while marginalizing customary rights and communal management. The coexistence of these successive legal layers creates a condition of legal pluralism (Roth, Boelens, and Zwarteveen, 2005). Consequently, rather than replacing older systems in a just manner to accommodate contemporary needs, these modern frameworks often sit atop traditional ones, allowing powerful interests to navigate between different legal codes to secure their dominance at the expense of local communities. This layering ensures that water governance remains a tool for elite accumulation, effectively stripping local populations of their historical agency while insulating political elites from accountability in the privatization of water services.

04

THE RIGHT TO WATER: INTERNATIONAL LAW, GOVERNANCE, AND THE STRUGGLE FOR ACCOUNTABILITY

The international legal recognition of the right to water has advanced considerably on paper. Yet the gap between normative commitment and lived reality is not simply a matter of incomplete implementation or insufficient political will. It is produced by a specific configuration of power at the international level, in which the institutions tasked with promoting the right to water simultaneously advance policies that undermine it. Understanding this contradiction requires examining the evolution of the right to water in international law, the governance paradigms that have shaped development practice and their shortcomings, as well as the technocratic frameworks that continue to depoliticize what is fundamentally a question of power and justice.

THE RIGHT TO WATER IN INTERNATIONAL LAW

The human right to safe drinking water was first explicitly recognized by the UN General Assembly and the Human Rights Council as part of binding international law in 2010 (UN, 2010). The human right to sanitation was recognized as a distinct right by the General Assembly in 2015 (UN, 2016). Prior to 2010, the right to water was implicitly enshrined in numerous international human rights treaties. The Convention on the Elimination of All Forms of Discrimination against Women (1979), the ILO Convention No. 161 on Occupational Health Services (1985), the Convention on the Rights of the Child (1989), and the Convention on the Rights of Persons with Disabilities (2006) all contained specific obligations relating to access to safe drinking water and sanitation. Access to water is closely linked to the realization of other human rights, including the rights to life, adequate housing, education, food, health, work, and cultural life. Water is also a key component of food security, livelihoods, income generation, and environmental protection.

A decisive shift occurred in 2002 when the UN Committee on Economic, Social and Cultural Rights (CESCR) adopted General Comment No. 15. This landmark document formally recognized water as a human right and a public good, rather than merely a limited natural resource. In doing so, it explicitly challenged the dominant view, promoted since the 1992 Dublin Principles, that water should be treated primarily as

an economic commodity. This interpretation established that everyone is entitled to sufficient, safe, acceptable, physically accessible, and affordable water for personal and domestic use. It shifted global discourse toward a human rights-based approach, later reinforced by the UN General Assembly in 2010, ensuring that access to water is recognized as a prerequisite for life and dignity. Yet, as Gupta, Ahlers, and Ahmed (2010) argue, despite growing consensus on the right to water, the fragmentation of water governance limits the practical impact of this recognition.

The right exists in law, but it does not exist in the daily experience of the 2.2 billion people who still lack safely managed drinking water or the 3.6 billion who lack adequate sanitation (WHO/UNICEF, 2021). Sultana and Loftus (2012) have demonstrated, through case studies across the Global South, that the gap between the normative recognition of water rights and their realization on the ground is not closing but widening, as the very institutions that endorsed the right continue to promote policies that commodify the resource and restrict access for those who cannot pay.

WATER IN MDGS AND SDGS

From a normative perspective, the principles adopted within the framework of the 2030 Agenda represent a turning point compared to the Millennium Development Goals. The fact that the Sustainable Development Goals apply to all countries establishes a more egalitarian framework. As Bartram et al. (2014) have shown, the gap between "improved" and "safely managed" services can be substantial, and the former category systematically overstates actual access. Another unresolved issue concerns bottled water: to what extent can it be considered an adequate source, given the plastic pollution it generates, despite being classified as such by some organizations and reporting countries? The UNDP's landmark Human Development Report (2006) argued, a decade before the SDGs, that the water crisis is fundamentally about power and poverty, not physical scarcity – a diagnosis that the SDG framework has yet to fully internalize. A letter from the Global Water Justice Movement to the UN raises concerns about the role assigned to the World Bank in implementing the goal and the reliance on private financing to achieve its targets. The letter criticizes the lack of accountability of private sector actors compared to the public sector, noting that private developers are not legally responsible for failing to provide sanitation and water services.

The trajectory from the UN Water Decade (1980–1990) through MDG 7c (2000–2015) to SDG 6 (2016–2030) reveals some improvements, but also persistent shortcomings. In the 1980s, the Water Decade improved average rural access to water from 30 to 50 percent. MDG 7c, which aimed to halve the proportion of the population lacking sustainable access to water and basic sanitation by 2015, was declared achieved based on Joint Monitoring Programme data indicating that, between 1990 and 2015, 2.6 billion people gained access to safe water and 2.3 billion to basic sanitation. Yet under the more ambitious SDG 6, which calls for ensuring access to water and sanitation for all by 2030, one in four people (2.1 billion) still lack safely managed drinking water, and almost half of the global population (3.4 billion) still lack adequate sanitation (WHO/UNICEF, 2025). The situation in the Arab MENA countries illustrates these persistent shortfalls. Lane et al. (2025), analyz-

ing JMP data from 2000 to 2022 across 17 Arab countries, find that the current rate of progress is insufficient to meet SDG 6.2 by 2030 in 13 of them. Beyond access, the study reveals a critical gap in the service chain: although wastewater is often safely collected, less than 50% is safely treated in seven of the eleven countries with available data. Bahrain treats over 90% of its collected wastewater, while in Lebanon, a mere 1.6% of wastewater reaching sewer connections is safely treated.

The question of accountability for the failure to realize the right to water and sanitation remains largely unresolved. The responsibilities of international institutions, such as the IMF and the World Bank, and donors in shaping crises and policy failures are rarely addressed. Instead, there is a recurrent deflection toward local corruption. Corporations are not legally accountable for failing to provide universal water and sanitation services. Privatization cases are often "cherry-picked," with corporate actors focusing on profitable urban areas able to pay.

THE GOVERNANCE PARADIGM AND ITS SHORTCOMINGS

Over the last decades, governance has been defined in broad terms encompassing the political, organizational, and administrative processes through which stakeholders articulate their interests, exercise their legal rights, make decisions, fulfill their obligations, and resolve their differences. A concept with many meanings, governance is often described as a catch-all term for governing without government. In development aid, however, the issue extends beyond its conceptual breadth to the prescriptive nature of "good governance" and the paradigm it carries. The adoption of the "good governance" framework has become a condition linked to development aid and is primarily imposed on Global South countries, where the power imbalance it reflects is deeply problematic.

Ferguson's (1994) foundational study of development interventions demonstrated how the apparatus of development functions as an "anti-politics machine," systematically rendering political problems as technical ones, expanding bureaucratic state power while simultaneously depoliticizing the conditions that produce poverty. The same dynamic operates in the water sector. As Swyngedouw (2005) has argued, the "shift from government to governance" consolidates techno-managerial arrangements that restructure the parameters of political democracy, producing a substantial democratic deficit. This transition, in which traditional state-led decision-making gives way to diffuse networks of public, private, and civil society actors, is fundamentally Janus-faced: it opens new channels of participation while simultaneously closing others, empowering certain stakeholders, typically those with market power, technical expertise, or institutional access. In the water and sanitation sector, this dynamic is particularly consequential. When service provision is delegated to corporate actors or managed through public-private partnerships, the locus of accountability shifts from elected officials answerable to citizens to contractual arrangements governed by commercial logic and regulatory technicalities. The most affected populations, the poorest, rural communities and those in conflict-affected settings, are precisely those with the least capacity to access decision-making processes. The democratic character of the political sphere is thus eroded by the expanding influence of market forces that shape the rules of the game within govern-

ance frameworks.

Bakker (2010) introduces the concept of "governance failure" to explain how both public and private water providers face structural limitations in extending services to low-income households. This is often driven by disincentives affecting both utility providers (public or private) and users: providers lack incentives to expand services to low-income areas, while households face barriers to connection due to limited coverage and inability to afford basic services. The role of international development agencies in shaping governance, particularly at the level where decisions about lending, conditionality, and policy reform are made, is often overlooked in analyses of failures in universal water provisioning. Administrative failures are frequently reduced to local corruption, without examining the role of international actors in simultaneously financing projects and promoting austerity, privatization, and a hegemonic assemblage of capital–ideology–network relations.

What is less visible, but equally consequential, is the systematic weakening of public water authorities that preceded and accompanied privatization. Structural adjustment programs imposed by the World Bank and IMF from the 1980s onward conditioned loans on reduced public expenditure, hiring freezes, and the elimination of subsidies, directly undermining the capacity of state agencies to maintain infrastructure, extend networks, and retain staff. Decades of enforced austerity hollowed out the very institutions that were later declared to have "failed," thereby providing justification for private sector entry. The weakening of public services created the conditions that made privatization appear necessary, while the diagnosis of "governance failure" obscured the role of external conditionalities in producing that failure (Bakker, 2010). In many cases, the retreat of public services has produced not a functional market solution, but a landscape of informal, unregulated, and deeply inequitable provision, in which the poorest pay the most for the worst-quality water.

IWRM AND THE LIMITS OF GOVERNANCE-TECHNOCRATIC FRAMEWORKS

While the governance paradigm spans multiple sectors and services, its most prominent expression in the water sector is Integrated Water Resources Management (IWRM). IWRM has been the dominant paradigm in the water sector since the early 1990s, promoted by the Global Water Partnership (GWP). The GWP defines IWRM as "a process which promotes the coordinated development and management of water, land, and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems." As Biswas (2004) argues, this "lofty phrasing has little practical resonance on water management practice."

The deeper problem, as Mollinga, Meinzen-Dick, and Merrey (2007) have argued, is that IWRM's claim to holism masks the reality that water management is irreducibly political. It is a process of contestation and negotiation among actors with unequal power, competing interests, and different relationships to the resource. By framing these political conflicts as problems of "integration," requiring better coordination and stakeholder participation, IWRM depoliticizes them, converting struggles over distribution and control into technical and financial exercises in planning. As Allouche (2016) has shown, IWRM

originated in lessons drawn from European and North American water management and was transferred as a panacea to the Global South, where international donors made it a prerequisite for funding. Mukhtarov (2008) demonstrates how this transfer operated through policy networks linking international organizations, donor agencies, and domestic technocrats, creating epistemic communities whose professional survival depended on reproducing the IWRM paradigm, regardless of local conditions. Countries were required to develop IWRM policy blueprints to access development loans.

Despite the challenges facing water in the Arab region, countries tend to align with imported paradigms promoted by international financial institutions. These strategies have long treated water as an economic commodity rather than a right. They promote the idea that markets can effectively manage water scarcity and regulate consumption by making water accessible primarily to those who can afford it. What is needed instead is grounded, context-specific experience at the local level, rather than a "one-size-fits-all" solution such as IWRM. Rather than applying uniform institutional tools, sound policies must account for contextual specificities, as water issues are inherently localized.

REMUNICIPALIZATION AS COUNTER-EVIDENCE

Despite more than three decades of sustained promotion of privatization and public-private partnerships by international financial institutions and national governments, water remunicipalization has emerged as a viable and enduring policy option in many cities and towns. Experiences with common challenges associated with private water management, including inadequate infrastructure investment, excessive profits and corruption, tariff increases, and environmental risks, have led many cities and policymakers to conclude that the public sector is better suited to deliver quality services and uphold the human right to water. One of the pioneering cases is Cochabamba in Bolivia, where a popular uprising in 2000 reversed the privatization of the city's water supply (Olivera and Lewis, 2004). Research coordinated by the Transnational Institute identifies at least 835 cases of remunicipalization of public services worldwide since 2000, involving more than 1,600 municipalities in 45 countries. Of these, more than 235 water-specific reversals across 37 countries have affected over 100 million people (Kishimoto and Petitjean, 2017).

The evidence compiled by such research demonstrates that remunicipalization offers numerous benefits for service users, workers, and local economies. Cost savings and service revenues can be allocated to broaden access, improve quality, and maintain infrastructure. Remunicipalization can reduce user fees where feasible, ensure sufficient staffing levels, and develop in-house service delivery capacities. It also supports other public services through cross-subsidization. Importantly, remunicipalization has helped secure fair working conditions, including union rights, occupational safety, proper tools, and opportunities for skills development. As McDonald (2014) has argued, the critique of privatization must extend beyond formal ownership to address corporatization: the introduction of business models, cost-recovery principles, and managerial logics into public utilities that can reproduce the exclusionary effects of privatization even when ownership remains nominally public. Hall and Lobina (2012) further challenge

the claim that private finance is necessary for water infrastructure, documenting that public finance has historically built the vast majority of water systems worldwide and continues to offer more equitable and sustainable financing models. The remunicipalization trend is significant not only for its practical outcomes, but also for what it reveals about the ideological claims that have driven water policy for three decades. If privatization were the only viable model, remunicipalization would not be expanding. Its growth across diverse political and economic contexts demonstrates that the "inevitability" of private sector involvement in water provision is an ideological assertion, not an empirical finding.

This accountability gap, running from the unfulfilled promises of international law, through the depoliticizing logic of governance and IWRM, to the documented failures of privatization, is the product of a governmentality assemblage shaped at the global level by those who benefit from its asymmetries. The challenge is not simply to strengthen existing institutions or refine current frameworks. It is to recognize that the language of governance, integration, and sustainable development, however well-intentioned, has consistently functioned to depoliticize what are fundamentally political questions: who controls water, who profits from it, and who is denied access.

05

PUBLIC POLICIES AND WATER: AN ECONOMIC LOGIC THAT PERPETUATES SCARCITY RATHER THAN ADDRESSING IT

The previous sections traced the historical architecture of water rights in the Arab region and the international legal and governance frameworks that have shaped, and failed to secure, access to this resource. This section sets out the conceptual and comparative approach of the report. Governance and rights-based frameworks describe the problem but do not explain how it is produced. As Loftus (2009) has argued, moving beyond governance frameworks and policy orthodoxy toward a political ecology of water is essential. This requires asking not how water can be better managed, but how the power relations that produce water injustice can be transformed. Zwarteveen and Boelens (2014) operationalize this approach by identifying four echelons of contestation: (1) the material distribution of the resource; (2) the content of rules, norms, and laws governing access; (3) authority over decision-making; and (4) the discursive knowledge systems that legitimize particular hydro-social orders.

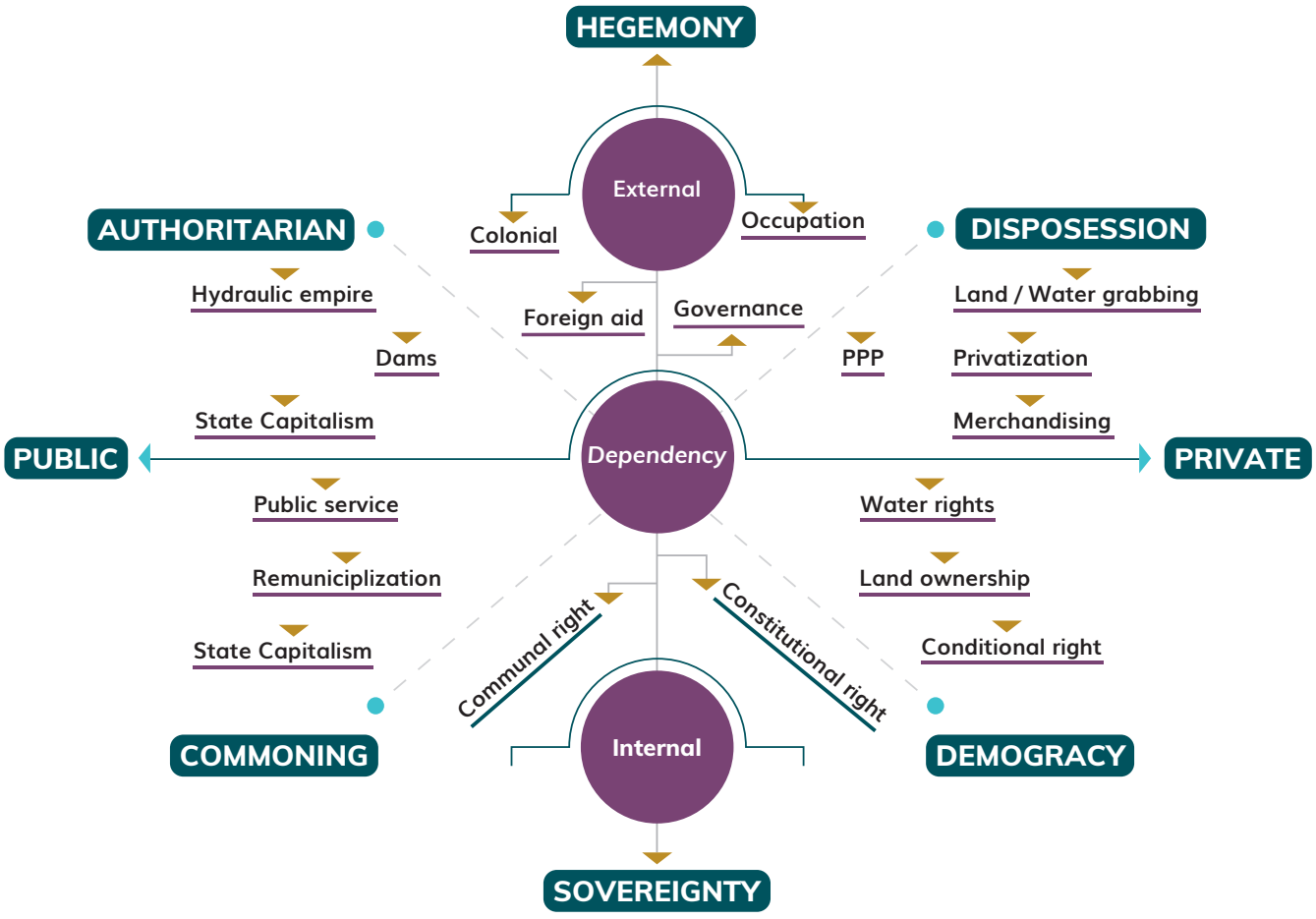
CONCEPTUAL FOUNDATIONS

As a field, political ecology examines how environmental problems are generated by political and economic forces rather than by nature itself (Robbins, 2012). Applied to water, it conceives the resource not as a neutral input to be optimally allocated, but as a hydro-social system in which power and capital co-produce infrastructure, policy, rights regimes, and forms of contestation. By integrating political, ecological, and economic dimensions, a political ecology approach provides the analytical tools necessary to understand the challenges documented across the fifteen national studies in this report. Historically, those who held political and economic power were able to control access to water resources, and vice versa, shaping the distribution and management of water to their advantage. Karl Wittfogel's (1957) concept of hydraulic civilizations illustrates how centralized control over water resources reinforced power structures in the region, leading to significant socio-political hierarchies. Worster (1985) demonstrated that this link between hydraulic infrastructure and authoritarian governance is not culturally specific to the "Orient," as Wittfogel implied, but rather a structural feature of large-scale water systems wherever they are built. Access to water has long been mediated by political power and social hierarchies, which con-

tinue to shape contemporary water management practices (Loftus, 2009). From a political ecology perspective, water rights are thus a product of these power relations, influenced by socio-political dynamics and economic interests.

Swyngedouw, Kaika, and Castro (2002) conceptualize this as socio-ecological metabolism: the flow of water as a resource necessary for sustaining life and enabling socio-economic activities, inseparable from the social relations that govern them. The heterodox concept of metabolic rift, developed by Marx and expanded by Foster (2000), refers to the disruption of natural cycles caused by capitalist production. Moore (2015) extends this into a broader framework of capitalism as a way of organizing nature, in which the extraction, diversion, and commodification of water for industrial agriculture, urban megaprojects, and export-oriented economies play a central role. To map the dynamics discussed in this chapter across the Arab region, we develop a conceptual framework structured around four axes: PUBLIC x PRIVATE, HEGEMONYxSOVEREIGNTY, AUTHORITARIAN x DEMOCRACY, and DISPOSESSION x COMMONING.

Figure 1:



The horizontal axis runs from PUBLIC to PRIVATE, marking the cleavage between treating water as a public good, managed through state or municipal institutions to guarantee universal access, and treating it as a market commodity governed by corporations, tariffs, and water rights. As discussed earlier, the selective operationalization of this principle by international financial institutions since Dublin Principle 4 (1992) has systematically prioritized the commodity framing over the rights-based approach. The governance paradigm presents itself as a neutral space of coordination and stakeholder participation, equidistant from all poles; in practice, however, it often functions as a conduit for external hegemony, channeling decision-making toward the interests of international lenders and donor-country corporations (Ferguson, 1994).

The vertical axis runs from HEGEMONY at the top to SOVEREIGNTY at the bottom. The upper half represents the domain of dominance: water regimes shaped by colonial powers, international financial institutions, transnational corporations, authoritarian regimes, and occupying forces. The lower half represents the domain of self-determination, where water governance is rooted in national and often local decision-making, communal institutions, and non-elitist, grassroots democratic participation. Hegemony captures how powerful actors, often externally driven in the Global South, from colonial regimes to international financial institutions and transnational corporations, impose their paradigms, with or without coercion. This may involve dispossession through large-scale projects, military force (as in the case of Palestine), or soft power mechanisms such as conditional loans, trade rules, and diplomatic pressure. Zeitoun and Warner (2006) developed the concept of hydro-hegemony to analyze precisely this dynamic: how dominant actors exploit their superior power position within shared river basins, not only through infrastructure and military capacity, but also through bargaining power, ideational control over what constitutes legitimate water use, and the ability to shape the terms of international agreements. Sovereignty, in contrast, entails autonomy and freedom of decision within a globalized political-economic order.

AUTHORITARIAN (top-left) highlights the concentration of decision-making within executive apparatuses, deploying coercion to achieve technical objectives. DISPOSSESSION (top-right) reflects the forcible capture of resources through eviction, confiscation, expropriation, or infrastructure projects. Harvey's (2003) concept of accumulation by dispossession resonates with this pole, where common or public assets are transferred to private ownership through seizure, enclosure, and commodification. COMMONING (bottom-left) describes collective practices that defend communal entitlements against commodification. Ostrom's (1990) foundational work demonstrated that communities can manage shared resources sustainably through self-governing institutions, without recourse to either privatization or centralized state control. DEMOCRACY (bottom-right) delegates authority through elections and participation; however, a key tension arises here between the protection of private property constitutional rights and the preservation of water as a public domain.

THE DOMINATION INTERFACES: DOMINATION, HEGEMONY, AND MARKETS

The AUTHORITARIANxPUBLIC interface is where statist infrastructural power

enacts biopolitical control, with public utilities functioning as apparatuses of governmentality. These systems are often heavily reliant on dams and large, centrally governed irrigation schemes operating within forms of state capitalism. Water remains publicly owned but serves the consolidation of centralized power. Hydraulic empires, state capitalism, and the large dam programs of postcolonial Arab states populate this space. The Libyan Great Man-Made River under Gaddafi, serving simultaneously as national infrastructure and as a tool of tribal patronage and political control, is a direct example. The Syrian case study further illustrates how the Assad regime used control over water resources as a weapon of war, including the deliberate targeting of infrastructure and the use of siege tactics to deny water to opposition-held areas.

The HEGEMONYxAUTHORITARIAN interface often produces regimes in which internal repression enables externally funded infrastructure agendas. The dam-building programs described earlier exemplify this interface, where colonial and nationalist powers used foreign aid to finance large-scale water infrastructure that served geopolitical containment strategies while consolidating domestic autocratic rule. Swyngedouw's (2015) analysis of hydraulic modernity traces this dynamic, showing how water infrastructure functions as a tool of political consolidation, agricultural modernization on regime-defined terms, and the reshaping of social geography – a pattern that closely parallels the dam-building era across the Arab region.

The DISPOSSESSION x HEGEMONY interface is where eviction meets coercion: state actors, external powers, or military forces displace communities to make way for water projects, framing dispossession as an imperative of "development" while suppressing dissent through coercive means. The occupation of Palestinian water resources represents an extreme manifestation of this interface, involving the systematic denial of sovereignty, the destruction of infrastructure, restrictions on water development, and the use of water as a form of collective punishment. Alatout (2009) has shown how scientific knowledge about water was actively constructed and mobilized to support settler-colonial state-building, demonstrating that hegemony operates through knowledge production as much as through force. Studies from Lebanon, Egypt, Tunisia, Morocco, and Jordan further illustrate how loans from the World Bank, IMF, and other development agencies are often conditional on adopting neoliberal reforms, including privatization. This conditionality ensures that development funds flow back to corporations and consultants from donor countries, creating a self-perpetuating cycle of dependency.

The PRIVATE x DISPOSSESSION interface is where market logic is driven by resource commodification, privatization, and land and water grabbing, often disguised as Foreign Direct Investment (FDI), as seen in Sudan, Egypt, Tunisia, and Morocco. Public-private partnerships operate within this interface, alongside the commodification of bottled water. The wave of privatization driven by international financial institutions since the 1990s is documented across nearly all national case studies. The shift toward export-oriented agriculture, highlighted in the Lebanese, Egyptian, Tunisian, Moroccan, and Sudanese studies, acts as a major driver of dispossession (Riachi and Martiniello, 2023). Water is diverted from small-scale, food-producing farmers to large agribusinesses cultivating high-value crops for export markets. The Egyptian case details how billions of cubic meters of Nile water have been allocated to desert megaprojects, while traditional farmers face restrictions and bans on water-intensive

crops. Studies from Tunisia and Morocco similarly show how prioritizing water for tourism and export agriculture leaves smallholder farmers increasingly water-stressed.

The DEMOCRACY x PRIVATE interface is where democratic regimes elevate and protect private property rights in constitutions at the expense of public provisioning, embedding capitalist logics at the core of many democracies. Land ownership and individual water rights belong within this interface. Democratic procedures also legitimize private provisioning, as elected bodies authorize concessions, delegating responsibility and control to corporations and reframing citizens as "clients" rather than rights-holders. The right to water within this interface becomes conditional, dependent on ownership, legal status, or the ability to pay water bills. The studies reveal a profound and widespread absence of meaningful democratic participation in water governance across the region. The Egyptian report describes how the state's authoritarian neoliberal turn has been accompanied by a sustained crackdown on dissent, with protests against water privatization met with force. The Sudanese and Tunisian studies, despite their revolutionary uprisings, show that the demand for democratic control over water remains largely unfulfilled, as post-revolutionary governments have continued similar neoliberal policies. The Mauritanian study highlights the limited role of civil society in water decision-making, constrained by lack of access to information and weak institutional mechanisms for participation. The Palestinian report is unique in the complete erosion of sovereignty under prolonged military occupation, rendering any form of national democratic water governance structurally impossible.

THE EMANCIPATORY INTERFACES: TOWARD A POST-NEOLIBERAL WATER SYSTEM

The lower half of the framework maps the emancipatory possibilities that the national studies document alongside patterns of injustice. The SOVEREIGNTYxDEMOCRACY interface forms the basis for deliberative social democracy at both the national and local levels. Constitutional rights to water, where they exist, bridge sovereignty and democratic participation. The COMMONINGxSOVEREIGNTY interface entails the statutory recognition of community-based water councils that institutionalize customary and local norms within national legal frameworks, creating space for plural forms of governance that are neither fully state-based nor fully communal, but draw on both. The PUBLICxCOMMONING interface is where water is publicly managed but grounded in grassroots decision-making rather than in the statist authoritarianism of the upper interfaces. Public service provision and remunicipalization belong within this space, along with unconditional rights to water, which derive from being human rather than from property or citizenship.

In the face of the dispossession, hegemony, and authoritarianism documented above, communities across the region engage in acts of commoning, reclaiming and managing water collectively. Many reports highlight historical water management systems that ensured sustainable and equitable use for centuries. The Egyptian study describes self-organized provisioning in informal neighborhoods in Cairo. The convergence of these emancipatory interfaces (PUBLICxCOMMONING, SOVEREIGNTYxCOMMONING, and DEMOCRACYxSOVEREIGNTY) brings into view a post-neoliberal architecture that transcends the binaries of state versus market, and public versus

private. Instead, it outlines the contours of a post-developmentalist regime that challenges commodification and technocratic arrangements. This regime is not only a reclamation of water as a public good; it also transforms the meaning of the public itself. Public utilities become more porous to communal decision-making, less centralized and more locally grounded, and accountable to citizens rather than to creditors. The required direction of transformation is from the upper interfaces of hegemony, authoritarianism, and dispossession toward the lower interfaces of sovereignty, commoning, and democracy. This does not simply mean shifting water into public ownership, which, as the AUTHORITARIANxPUBLIC interface demonstrates, can serve authoritarian ends as readily as emancipatory ones. Rather, it entails making water systems simultaneously sovereign, democratic, and grounded in commoning practices.

The right to water in the Arab world is, at its core, a political and ecological question. It is shaped by a history of legal pluralism that elites strategically exploit, by a persistent donor-driven push to commodify a public good, by hegemonic powers that constrain national sovereignty, and by authoritarian or clientelist political systems that systematically exclude citizens from decision-making. The fifteen national studies reveal that while specific configurations vary considerably, from the oil-funded sovereignty model of Qatar to the post-conflict fragility of Syria, Libya, and Yemen, from occupied Palestine to the clientelist labyrinth of Lebanon, the underlying struggle remains remarkably consistent. It is a struggle to reclaim water from the intersecting forces of dispossession, external hegemony, and domestic authoritarianism, and to reimagine it as what it has long been in the region's deepest legal and ethical traditions: a common good, managed equitably and sustainably for all.

06

CONCLUSION AND WAY FORWARD

The evidence assembled across the national studies, thematic reports, case studies, and the analytical framework developed in this chapter converges on a single finding: the water crisis in the Arab region is not a crisis of scarcity, but a crisis of power, in which hegemony, authoritarianism, dispossession, and the commodification of a common good are identifiable and must be dismantled. The path toward change requires confronting the following interconnected imperatives.

The systematic impoverishment of public water authorities must be reversed. The austerity conditionalities imposed by international financial institutions have hollowed out state capacity to the point where failure becomes self-fulfilling. Restoring public investment in water infrastructure, staffing, and maintenance is not a return to a failed model; it is a precondition for any model to function. Remunicipalization experiences demonstrate that public provision is not only viable, but capable of delivering better outcomes in terms of access, quality, affordability, and labor conditions than the private alternatives it has replaced. The conditionality regime that ties development finance to privatization and public-private partnerships must be challenged. Laws and policies drafted to comply with international agency agendas have consistently served external interests rather than domestic populations. Addressing this requires both national-level resistance to imposed reforms and international solidarity among water justice movements to hold donors and lenders accountable for the consequences of their conditionalities.

Communal and local water management systems must be recognized and strengthened. The challenge is to create legal and institutional space for these practices without subordinating them to the logics of either the state or the market. The weaponization of water in conflict must be explicitly addressed as a violation of international humanitarian law. The Palestinian, Lebanese, Syrian, Yemeni, Sudanese, and Libyan cases document the deliberate destruction of water infrastructure and the denial of access to civilian populations as instruments of war. These are not collateral effects of conflict, but tactics of collective punishment. The international community's failure to enforce existing protections or to hold perpetrators accountable amounts to complicity.

Finally, climate adaptation strategies must be grounded in justice rather than technocratic management. Climate change is deepening every dimension of the water crisis, with its burden falling most heavily on those least responsible for emissions and least equipped to adapt. Nature-based solutions must be embedded within institutional structures that grant affected communities genuine decision-making power. In a region warming faster than the global average, the convergence of public

ownership, communal power, and democratic sovereignty, outlined in this chapter's framework, points toward post-neoliberal water systems. This does not mean simply returning water to state control, but rather building systems that are simultaneously sovereign, democratic, grounded in commoning practices, and accountable to citizens. Neither scarcity nor mismanagement adequately explains the denial of water to tens of millions of people in the Arab world. What explains it is a political economy that treats water as a commodity, a tool of control, and a source of profit.

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works in 12 Arab countries, with 9 national networks (with an extended membership of 250 CSOs from different backgrounds) and 25 NGO members.

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