

## THE RIGHT TO WATER IN PALESTINE

A Rights-Based Approach in Facing Social,  
Economic, and Political Challenges within the  
Context of Climate Change

Dr. Ayman Rabi

Palestinian Hydrology Group



The production of this report, including the national consultations conducted as part of its preparation, was supported by Palestinian Hydrology Group

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.

Beirut, © 2025. All rights reserved.

The report is published by the **Arab NGO Network for Development** (ANND). It can be obtained from ANND or can be downloaded from the following website

<http://www.annd.org>

**This report or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of the publisher except for the use of brief quotations.**

SUPPORTED BY



Norwegian People's Aid

## THE RIGHT TO WATER IN PALESTINE

A Rights-Based Approach in Facing Social, Economic, and Political Challenges within the Context of Climate Change

**Dr. Ayman Rabi**

Executive Director of Palestinian Hydrology Group

Dr. Ayman Rabi, the Executive Director of Palestinian Hydrology Group, Palestine. He holds MSc and PhD in Water Resources Engineering and has MBA in Business Administration. He has more than 35 years of water and environmental related experience and contributed to many local and international water and environmental technical and policy research. He is a regional councillor of International Union for Conservation of Nature (IUCN) and he is a member of the advisory board of the Rosenberg International Forum on Water Policy and he is also the national representative for Palestine within the International Association of Hydrological Sciences (IAHS).



# CONTENTS

INTRODUCTION	06
WATER RESOURCES IN THE STATE OF PALESTINE AND THEIR USES	08
CLIMATE CHANGE, ENVIRONMENTAL CHALLENGES, AND THEIR IMPACT ON THE RIGHT TO WATER	12
THE EVOLUTION OF LAWS, POLICIES, AND INSTITUTIONAL FRAMEWORKS RELATED TO WATER IN PALESTINE	14
GEOPOLITICAL CHANGES AND THEIR IMPACT ON WATER RIGHTS IN PALESTINE	18
THE RIGHTS-BASED APPROACH TO WATER	22
THE LINK BETWEEN THE RIGHT TO WATER AND OTHER SOCIAL AND ECONOMIC RIGHTS AND THE CONSEQUENCES OF THE PALESTINIAN PEOPLE BEING DEPRIVED OF THE RIGHT TO WATER	25
RESULTS AND RECOMMENDATIONS	27
REFERENCES	28

# 01

## INTRODUCTION

Water has always been the lifeline of Palestinian society. The existence of Palestinian towns and villages has long been linked to the availability of water, especially since the majority historically relied on agriculture for their livelihoods. Water from springs, streams, and rivers, particularly the Jordan River and shallow groundwater sources (such as those in the Coastal Aquifer Basin), has played a crucial role in shaping the identity, culture, and patterns of agriculture across different regions. For instance, in the plain areas such as the Beisan Plain, the Jezreel Valley, the Galilee plains, the coastal plain, and the Jordan Valley, agriculture focused on vegetables, wheat, barley, legumes, citrus fruits and bananas in the Jericho and Jordan Valley areas. Additionally, orange cultivation became widespread in the coastal plain in Jaffa, whose name became synonymous with oranges. Since the early nineteenth century, Jaffa oranges became an important export commodity with significant economic returns. In addition to irrigated agriculture, rainfed agriculture developed in mountainous regions, particularly the cultivation of olives, grapes, and figs. This led to diversity and integration in agricultural production, and self-sufficiency in several key goods or strategic crops, such as wheat, barley, legumes, and oil, across Palestine.

In the past, Palestinian society coexisted

with these water sources and adapted to their productive capacity, developing mechanisms for managing water resources and sharing the water of springs and rivers, beginning with the agricultural lands that were irrigated naturally by their flow. These arrangements turned into acquired water rights for landowners, which could be inherited, sold, and purchased along with the associated lands. The Islamic Sharia law served as the primary reference for managing these resources and resolving any disputes that arose regarding their management or distribution. This period was characterized by a balanced and sustainable use of resources, avoiding depletion and ensuring their preservation.

With the end of World War I, the era of British colonialism in the region began. The Balfour Declaration was issued, facilitating Zionist colonization of Palestinian lands, the seizure of land and water, the establishment of Zionist colonies, and the denial of Palestinian water rights, particularly through the discriminatory application of international law and systematic changes to existing laws. The British Mandate authorities strengthened Zionist settlers' control over land and resources, often allowing them to act outside the law and providing them with protection, while strictly enforcing laws against the Palestinian rightful owners. This prevented Palestinians from taking

any action to protect their rights and lands (Ward, Ruckstuhl and Learmont 2022). With the expansion of Zionist colonialism and the implementation of major water projects, such as the drainage of Lake Hula, the establishment of the National Water Carrier, which diverted water from Lake Tiberias to the Negev in the south, and the drilling of deep wells, the characteristics of water sources changed, disrupting the existing environmental and water balance. These resources were depleted to serve the interests and needs of the settlers at the expense of Palestinian rights. Despite these measures and the ongoing violations of these rights by the Occupying State since 1948 to the present day, water rights of the Palestinian people are guaranteed under international laws and norms.

This paper examines the Palestinian people's right to water and the main challenges that continue to hinder access to this right. It adopts a rights-based approach, recognizing that the right to water is a fundamental human right and an integral part of a comprehensive and indivisible system of rights. Furthermore, the paper reviews economic and social policies and their relevance to the right to water, as well as other related rights, such as the rights to food, housing, and health, etc. The study also adopts a gender approach and explores the possibility of integrating it into the right to water and linking it to other relevant agreements. It also clarifies the extent to which climate change affects water availability and its repercussions on the right to water.

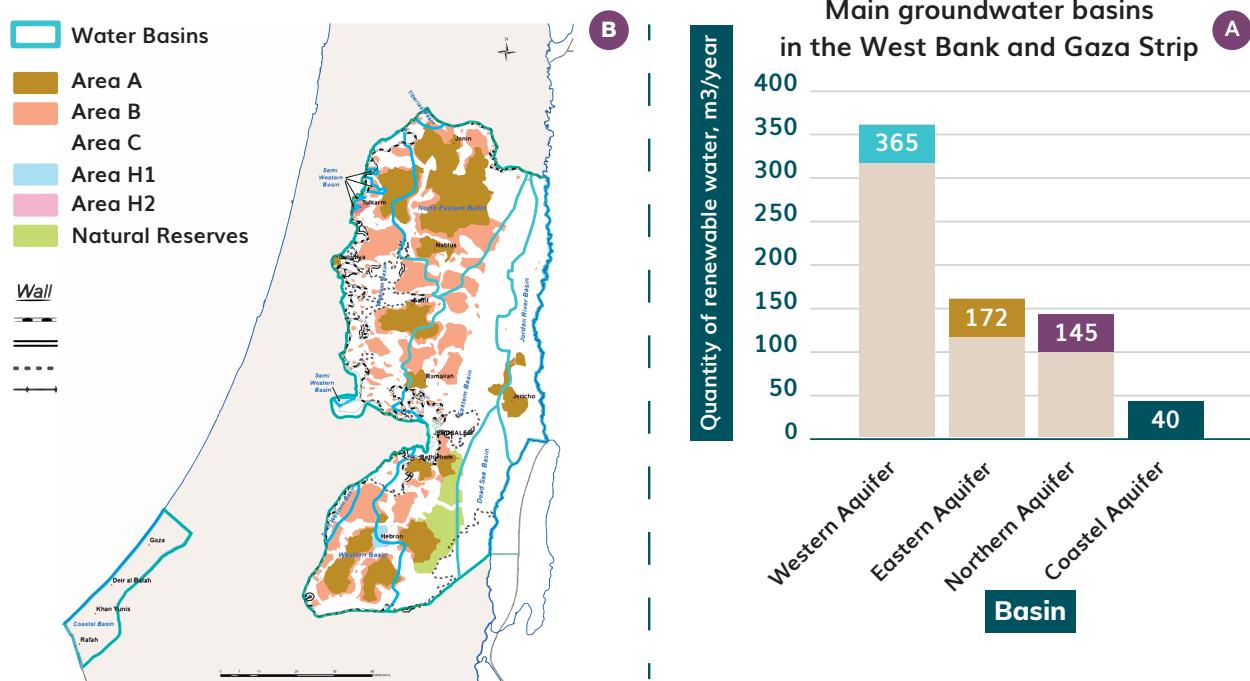
# 02

## WATER RESOURCES IN THE STATE OF PALESTINE AND THEIR USES

Groundwater is one of the main renewable water resources; in fact, it is the only water source available to Palestinians in the West Bank and Gaza. The volume of renewable groundwater in the West Bank is estimated at about 682 million cubic

meters annually, in addition to 40 million cubic meters in the Gaza Strip (Palestinian Water Authority, 2015). This groundwater is distributed across four main aquifers – three in the West Bank and one in Gaza – as shown in Figure 1 ("A" and "B").

➤ **Figure 1: Main groundwater basins in the West Bank and Gaza Strip**



The Western Aquifer is the largest groundwater basin in the West Bank in terms of renewable productive capacity. However, the Occupying State only allows

Palestinians access to approximately 11% of the aquifer's renewable water, while it appropriates 89% of its water (Palestinian Environment Quality Authority, 2024). The

quality of groundwater in the West Bank is generally good, with salinity levels<sup>1</sup> ranging between 265 and 449 mg/L, which falls within Palestinian standards (1,000 mg/L) (Mahoud, Zayed, and Petrushevski 2022). By contrast, groundwater quality in the Gaza Strip is saline, with an average salinity of approximately 3,260 mg/L to 18,350 mg/L (Shomar and Rovira 2023). As a result, 97% of the groundwater in Gaza has been classified as unfit for drinking.

The Jordan River and its tributaries, from its source through Lake Tiberias to its outlet into the Dead Sea, are the only perennial source of surface water in Palestine. The river has three primary headwaters; the Golan Heights in Syria, southern Lebanon, and northern Palestine – namely, the Banias, Hasbani, and Dan rivers – with average annual discharges of approximately 121, 138, and 245 million cubic meters, respectively. These three rivers merge to form the upper course (Al-Sharia) of the river, passing through the Hula Valley and Lake Hula (which was drained by the Occupation in the early 1950s) and Lake Tiberias, which is considered one of the main sources of fresh water. The water volume of the lake is approximately 4 billion cubic meters. The river continues its flow from the southern end of Lake Tiberias, joined by the Yarmouk River south of the lake, and through several side valleys, emptying in the Dead Sea. The annual flow in the lower part of the river, which flows into the Dead Sea, used to range between 1.2 and 1.4 billion cubic meters (UN ESCWA and BGR 2013). However, the current flow rate does not exceed 30 million cubic meters, most of which consists of saline spring water that used to flow into Lake Tiberias but has since been diverted by the Occupying State to the lower part, along with wastewater

from settlement drainage. The Occupying State has closed the river's outlet in the southern end of Lake Tiberias, pumping approximately 540 million cubic meters of water from the lake annually through the National Water Carrier toward the Negev in southern Palestine. Additionally, the flow of the Yarmouk River has decreased due to its exploitation by upstream countries (Palestinian Water Authority, 2013). The Occupying State controls more than 45% of the river's water and denies Palestinians both their rightful share and access to the river. Moreover, the decreased flow of the Jordan River has reduced the amount of water flowing into the Dead Sea to approximately 3% of its annual flow rate. This has caused the water level of the Dead Sea to drop by roughly one meter annually, creating numerous environmental and natural problems, such as the formation of sinkholes and others.

Non-conventional water resources include wastewater, surface runoff, and desalinated water. The volume of wastewater produced annually in the West Bank and Gaza Strip is estimated at around 150 million cubic meters. About 60% of this wastewater is collected through sanitation networks, while only 25% is treated (State of Palestine, 2018). The main reason for the lack of wastewater treatment is that the occupying authorities prevent Palestinians from establishing treatment plants. To issue permits for such facilities, the authorities require that the sewage from settlements be connected to these plants, thereby legitimizing these illegal settlements and imposing a policy of *fait accompli* on the Palestinians. For the Gaza Strip, the amount of treated wastewater from five plants amounted to approximately 58.4 million cubic meters in 2021. Around 19.6 million cubic meters are

<sup>1</sup> Total dissolved solids (TDS).

re-filtered from the North Gaza plant and the Sufa treatment plant into the Coastal Aquifer, while approximately 38.8 million cubic meters are pumped into the sea (Coastal Municipalities Water Utility, 2022).

The amount of surface runoff in the West Bank is estimated at around 82 million cubic meters annually (Palestinian Water Authority, 2024). However, the Occupying State prevents Palestinians from utilizing this water. In the Gaza Strip, Wadi Gaza is the main source of surface runoff, with an average flow that once reached around 20 million cubic meters annually (Palestinian Water Authority, 2018). It is currently completely dry due to the depletion of its feeder waters by the Occupying State before reaching the Gaza Strip.

Furthermore, the total desalinated water produced in the Gaza Strip amounted to approximately 9.6 million cubic meters in 2022 from all desalination plants, including private plants (Palestinian Central Bureau of Statistics, 2024). This situation changed during the ongoing war on the Gaza Strip since October 7, 2023, as most of these plants were disrupted due to a lack of energy. Some plants were destroyed, while two remained partially operational (the Central and Southern Gaza Plants), producing approximately 5,068 cubic meters per day (Wash Cluster, 2024).

In 2022, water consumption in the West Bank and Gaza Strip reached about 159.7 million cubic meters for domestic and industrial purposes, with 67.9 million cubic meters in Gaza and approximately 91.8 million cubic meters in the West Bank. This represents 63.6% of the total supplied water (250.8 million cubic meters per year), due to water losses of approximately 33% in the West Bank and 40% in Gaza. Agricultural use amounted to about 158.1

million cubic meters, with around 58.1 million cubic meters used in the West Bank (exclusively from groundwater wells) and about 100 million cubic meters in Gaza<sup>2</sup> (Palestinian Central Bureau of Statistics, 2024a).

The average per capita consumption of drinking water in the Gaza Strip is about 84.6 liters per person per day, and approximately 86.4 liters per person per day in the West Bank in 2022 (Palestinian Central Bureau of Statistics, 2024a). It should be emphasized that in some marginalized communities in the West Bank – and in most areas of Gaza during the current war – per capita water use does not exceed 10 liters per day. This is due to the lack of adequate infrastructure in the West Bank and the near-total destruction of water infrastructure, wells, and desalination plants in Gaza Strip. Additionally, agricultural water use has sharply declined in Gaza as a result of the destruction of wells and agricultural lands.

Water demand is linked to population size and to the overall economic and social situation. The population of the West Bank and Gaza Strip is projected to reach about 6.5 million by 2030 (not accounting for the current situation, as the population in Gaza has declined due to the ongoing genocide, which has resulted in more than 63,000 deaths). Accordingly, demand for drinking water is expected to reach 237 million cubic meters, based on a per capita consumption rate of 100 liters per day, as recommended by the World Health Organization (WHO). Assuming a loss rate of approximately 25%, the total quantity required would be approximately 296 million cubic meters (Environment Quality Authority, 2024).

Demand for agricultural water will depend on several factors, mainly climate

<sup>2</sup> The groundwater used is saline water from groundwater wells.

change and the availability of irrigable agricultural land, particularly in the Gaza Strip, due to the destruction of agricultural land during the ongoing war since October 7, 2023, to the present day. The Food and Agriculture Organization (FAO) estimates that approximately 101,830 out of 150,580 dunums of agricultural land were destroyed by the Occupation forces during the current war on Gaza, in addition to the destruction of 1,188 water wells, irrigation networks, pumping stations, and other infrastructure (FAO, 2025). As for the West Bank, the area of irrigated land is set to increase, especially if the lands located in Area C are exploited, which the World Bank estimated at approximately 326,400 dunums (World Bank, 2013). The irrigation of these lands would require about 189 million cubic meters of water annually, in addition to the currently available quantity. Therefore, assuming that Palestinians will be able to utilize 25% of the land designated as "Area C" for agriculture in the West Bank and reclaim 30% of the destroyed land in the Gaza Strip by 2030, in addition to the existing 32% of agricultural land, the demand for agricultural water in the West Bank and Gaza Strip is expected to reach 200 million cubic meters<sup>3</sup> by 2030.

<sup>3</sup> Agricultural water demand for additional lands around 2030 was calculated at 800 m<sup>3</sup>/year/dunum.

# 03

## CLIMATE CHANGE, ENVIRONMENTAL CHALLENGES, AND THEIR IMPACT ON THE RIGHT TO WATER

Climate change plays a significant role in worsening the water crisis in Palestine, both quantitatively and qualitatively, especially in light of the occupation, which continues to deny the Palestinian people their right to sovereignty over their natural resources. This has also hindered the emergence of a strong economy that allows for the development of alternatives to overcome or adequately adapt to these challenges. Al-Haq Foundation (2021) explained that the occupation's policies and measures to dominate and control natural and environmental resources, and to impose restrictions on Palestinian human rights, including rights to Palestinian environmental and natural resources, significantly deepen the negative impacts of climate change on Palestinians and their various rights, including the rights to water, security, peace, health, and well-being.

Based on the various emission scenarios addressed in the Fifth Assessment Report on Climate Change issued by the Intergovernmental Panel on Climate Change, potential climate change projections in Palestine were identified within three scenarios. The second scenario indicates a potential decrease

in rainfall of approximately 15%, a 2°C rise in temperature, increased drought periods, and a decrease in cold periods by 2055. Similarly, the risks expected from climate change include an increase in the frequency of severe heat waves, changes in rainy season patterns, increased likelihood of drought, increased risk of flooding in some areas, as well as rising sea levels and temperatures, which could lead to groundwater contamination, salinization, and depletion, not to mention impacts on agriculture, local food production, and the degradation of agricultural land and biodiversity. All of these factors negatively impact health, work, and livelihoods (Environment Quality Authority, 2016), and consequently impact various rights, such as the rights to water, food, health, a decent living, and a safe environment. To ensure that the challenges posed by climate change in Palestine are overcome, certain measures must be taken. Examples include:

Strengthening water resilience to climate change: By enhancing the efficiency of water systems and infrastructure, reducing waste, rationalizing consumption, increasing irrigation efficiency, and sustainably

increasing the available quantities from traditional and non-traditional resources, especially through rainwater harvesting or reuse of treated water.

Promoting effective management methods for water resources and systems, in line with climate change: By developing appropriate policies and procedures to adapt to climate change, and developing appropriate implementation mechanisms for these policies to prevent resource depletion, ensure these resources are not polluted, and maintain their sustainability.

Investing in nature-based solutions: by enhancing the role of ecosystems in supporting water sustainability, adopting measures provided by nature to ensure the continuity of resources, managing watersheds to ensure natural groundwater recharge and increased soil moisture, mitigating the effects of floods and soil erosion, managing drought by selecting drought-resistant crop varieties, adapting agricultural patterns to available water quantities. Additionally, it includes practices to increase groundwater resource availability by feeding groundwater basins with floodwaters, to ensure the sustainability of these resources.

Enhancing synergy between energy, water, and agriculture (food production): To enhance the complementary role of these vital sectors and ensure equal access for citizens, and to prevent the prioritization of one sector at the expense of another, i.e. food production regardless of its impact on water availability and quality, or energy production regardless of other needs related to water and food. As previously mentioned, all of these are interconnected with the right to water and other rights.

In this context, the state, as a duty-bearer, must allocate appropriate

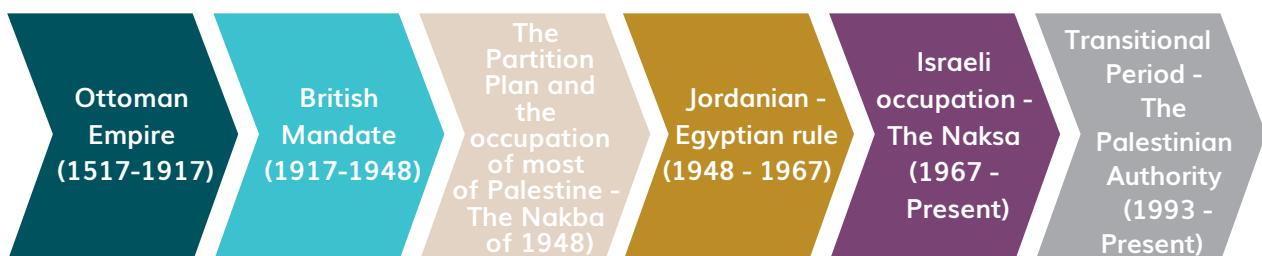
funds, whether from the general budget or by directing foreign aid funds toward promoting these measures and solutions. According to the Palestinian Authority's 2023 general budget report, spending on development issues related to water and agriculture amounted to only 1% of the total estimated budget for 2023. If spending on health services and energy is included, the percentage becomes 1.6% of the estimated budget (Aman, 2024). This percentage is considered small compared to the magnitude of the need to develop vital sectors that would ensure access to the right to water and other related rights, such as health, housing, and others.

# 04

## THE EVOLUTION OF LAWS, POLICIES, AND INSTITUTIONAL FRAMEWORKS RELATED TO WATER IN PALESTINE

Palestine has experienced exceptional circumstances throughout successive historical periods from 1517 to the present day, as illustrated in Figure 2

➤ **Figure 2: Evolution of the eras of rule in Palestine**



The laws in force in Palestine evolved in each era as follows:

Islamic Sharia law constituted the basic law in Palestine during most of the Ottoman era. However, with increasing external pressure from Western powers on the Ottoman Empire, new laws emerged, and the *Majalla al-Ahkam al-Adliyya*, or Civil Code, and the Land Code were issued in 1858. The development of laws, some of which were introduced from the West, continued until 1913 (Birzeit University, 2008).

- The British Mandate authorities amended and abolished some Ottoman laws in force in Palestine, contrary to the Mandate system, which

stipulated that the Mandate State should not change existing laws and should protect the interests of the people under the Mandate. However, the Mandate authorities did not abide by this requirement. One of the main laws they amended was the Land Law, allowing Jews to own land in Palestine (Birzeit University, 2008).

- After Britain decided to end its mandate over Palestine and submit a plan to the United Nations to partition Palestine, setting August 15, 1948, as the deadline for its withdrawal, the United Nations General Assembly issued Partition Resolution No. (181) of 1947, which stipulated the partition of Palestine

into a Jewish state established on an area equal to 56.47% and an Arab state established on 42.53% of the area of historical Palestine, excluding Jerusalem, which was placed under international guardianship. After the rejection of the partition resolution, the outbreak of war in 1948, and the Nakba, the Zionist movement controlled 78% of the land of Palestine, an increase of 22% over what was stipulated in the partition resolution. The Mandate authorities transferred the rule of the remaining part of Palestine to Egypt in the Gaza Strip and Jordan in the West Bank, a status that continued until 1967. During the transitional period (1948-1951), Jordan retained the laws that were in effect during the Mandate period. When the West Bank was unified with the East Bank to form the Hashemite Kingdom of Jordan, some laws were amended and many new ones were issued; mainly, the Land and Water Settlement Law No. (40) of 1952 (Birzeit University, 2008). It should be noted that the Egyptian authorities issued a decree to maintain all existing Mandate-era laws in the Gaza Strip, while introducing some regulatory legislation and introducing minor amendments to certain laws without altering their core.

- Following the 1967 Naksa and the occupation of the West Bank, Gaza Strip, Golan Heights, and Sinai, the occupying authorities issued military orders replacing the laws in effect in the West Bank and Gaza Strip. Military Order No. (92), dated August 15, 1967 ("Order Regarding Powers Under Water Provisions"), stipulated the following: "Full authority to control all matters relating to water is granted to the Israeli Water Officer." Military

Order No. (158) was also issued on November 19, 1967, which "places all wells, springs, and water projects under the direct authority of the Israeli military governor." Military Order No. (291), issued on December 19, 1968, stipulated that "all water sources in the Palestinian territories became the property of the state in accordance with the Israeli law issued in 1959." Furthermore, Military Order No. (948) was issued, requiring every citizen in the Gaza Strip to obtain the approval of the Israeli military governor if they wished to implement any water-related project.

- The so-called "Oslo Interim Agreement" (1993-1995) was signed between the Palestine Liberation Organization (PLO) and the Occupying State. Under this agreement, the West Bank was divided into three areas: "A," "B," and "C" (Figure 1b). Area C, which comprises approximately 60% of the West Bank, remained under the complete control of the Occupying State. A permanent agreement was supposed to be signed to reach a final settlement and resolve the pending issues of Jerusalem, refugees, borders, and water within five years, i.e., by 1999. Following the signing of the Oslo Interim Agreement and the establishment of the Palestinian Authority (PA) in 1995, numerous laws and legislations were promulgated, and the amended Palestinian Basic Law (2003) constituted the legislative basis in Palestine. The law stipulated various rights, including the right to a clean and balanced environment (Article 33). Accordingly, various Palestinian laws were issued to regulate the state's work in protecting these rights, including laws related to water, whether directly, such as Water Law No. (3) of 2002 and

Presidential Decree Law No. (14) of 2014 on Water, or indirectly, such as the Agriculture Law, the Environment Law, the Local Authorities Law, and the Public Health Law.

- In addition to these key laws, several regulations and decisions have been developed to implement the laws and regulate the water sector appropriately. A water policy (2012-2032) was developed, emphasizing Palestinian water rights to water resources, particularly those extending beyond the borders of the West Bank and Gaza

Strip, as well as the right of Palestinian citizens to obtain sufficient quantities of water of appropriate quality at affordable prices, as well as access to sanitation services. This water policy also emphasized the principle of equality for all segments of society, including marginalized groups and women, to obtain this right (Palestinian Water Authority, 2012).

- Under these laws, the main responsibilities were assigned to ministries and government agencies as per Table 1:

➤ **Table 1: Roles and responsibilities of water-related institutions**

Institution Name	Role and Responsibilities
Palestinian Water Authority	Responsible for regulating the water sector, developing and implementing regulations, policies, strategies, and plans, and working to achieve equitable distribution and optimal use to ensure the sustainability of resources.
Water Sector Regulatory Council (WSRC)	Monitoring water service providers to ensure the quality, efficiency, and affordability of water and sanitation services for citizens in Palestine.
Local Authorities and Municipalities	Providing water and sanitation services.
Ministry of Local Government	Constitutes the legal authority for local authorities and is responsible for them.
Ministry of Agriculture	Managing agricultural water, developing water plans and policies for the agricultural sector.
Ministry of Health	Responsible for some health aspects of drinking water quality and health supervision of systems and stations involved in wastewater treatment.
Environment Quality Authority	Set the necessary standards for the reuse or disposal of wastewater in accordance with environmental and public health preservation.
Palestinian Standards Institution	Develop Palestinian specifications and standards for drinking water, treated wastewater, materials, and equipment, and authorize the use of materials that comply with these standards.
Non-Governmental Organizations	Operate in areas where official institutions do not operate, especially in marginalized communities, to ensure equitable access to water for all members of society.
Academic and Research Institutions	Contribute to conducting scientific research and studies and finding solutions to certain problems. They also train technical cadres of engineers, specialists, and researchers in the water sector.

Despite the existence of diverse laws, regulations, and policies issued by the PA, and given the role of various governmental and non-governmental institutions,

with some of these laws and policies referring to the right of Palestinians to access drinking water or the right to a clean and safe environment, the PA,

across all its institutions, is unable to effectively implement these laws and policies, especially those related to the right to water. The primary reason is that Palestine remains under occupation, with the occupying authorities maintaining control over all matters related to water, including the quantity and price supplied to Palestinians, especially drinking water. Furthermore, it is impossible to enforce any of these laws in what is known as Area C. However, the PA has implemented some limited regulations, such as the tariff system for specific service providers, or setting certain procedural and organizational matters related to water supply in what

are known as Areas A and B.

In addition, there is still some duplication in certain laws. For example, while Presidential Decree No. (14) on Water Law mandates local authorities to implement the right to water for every Palestinian citizen and assigns the WSRC to monitor and regulate the performance of these authorities, the legal authority governing their work is actually set by the Local Authorities Law, which falls under the Ministry of Local Government.

# 05

## GEOPOLITICAL CHANGES AND THEIR IMPACT ON WATER RIGHTS IN PALESTINE

Palestinian water rights have remained constant throughout history and across various eras of rule, from the Ottoman era until 1948. The water rights of the Palestinian people remained unchanged throughout all of these periods. However, with the occupation of the majority of Palestine (78%) in 1948 and the establishment of the occupying entity, new dynamics began to emerge regarding the control and use of water resources for the benefit of the Occupying State at the expense of the original right holders. The situation was further solidified with the occupation of the remaining parts of Palestine in 1967, when the Occupying State assumed full control over all Palestinian territory and declared all water resources in the newly occupied areas as state property (Military Order No. (2) of 1967). However, the international community does not recognize the measures taken by the Occupying State in the territories occupied in 1967, as they were considered a violation of international humanitarian law and the Hague Regulations of 1907. Moreover, the Occupying State is regarded as an occupying power and may not alter the status of resources in the territories under its occupation, nor is it entitled to deplete or use them for the benefit of its own citizens. The UN has issued several resolutions in

this regard, affirming the sovereignty of peoples over their resources and linking it to the right to self-determination. It has also affirmed the permanent sovereignty of States and peoples under occupation and racist colonial domination over their natural and national resources (Resolution 3336 (XXIX)D-29 of 1974). Accordingly, Resolution 3005 (XXVII)D-27 of 1972 and Resolution 3175 (XXVIII)28 of 1973, entitled "Permanent sovereignty over national resources in the occupied Arab territories," were reaffirmed, in addition to affirming the right of States and peoples whose territories are under Israeli occupation to full and effective sovereignty over all their resources and wealth. These resolutions affirmed that all measures taken by Israel to exploit the wealth, natural resources, and other resources of the occupied Arab territories are illegal, and called upon Israel to revoke such measures. However, the Occupying State has not complied with any of these resolutions, and has continued to alter, deplete, and control those resources for the benefit of its own citizens while denying the Palestinian people their rightful access.

The Palestinian people's right to sovereignty over their wealth and resources is established by UN resolutions, relevant international laws, and customary

law. This right does not change as a result of geopolitical or geographical changes imposed by force by the occupying power. This right cannot be changed by the imposition of measures and policies that restrict the exercise of sovereignty over resources or lead to the partial or total denial of the use of these resources by the occupying power. This right shall remain in effect with respect to all water resources, specifically surface resources, particularly in the Jordan River Basin or in groundwater basins, and with retroactive effect. Therefore, compensation must be paid for the quantities that were prohibited from being used and for the damage caused during the period of deprivation of this right, in line with what the United Nations General Assembly affirmed in its Resolution No. 3336 (XXIX) D-29 of 17/12/1974, which states the following: "Reaffirms the right of Arab States and peoples, whose territories are subjected to Israeli occupation, to a permanent, total and effective sovereignty over their natural and other resources, and wealth; and be fully compensated for any exploitation, depletion, damage or losses."

Although several initiatives and proposals have attempted to present the Jordan River Basin as a shared river, notably, the 1953 Johnston Initiative, these were never implemented, and the Palestinian people did not participate in any of the related discussions. Consequently, the current patterns of water use in the basin are not covered by any agreement between the riparian parties.<sup>4</sup> Therefore, the Palestinian right to the basin's waters still exists, despite Palestinians being prohibited from exercising this right and exploiting it to serve the interests of the occupying power. As for the right to groundwater, this refers to the groundwater basins located in the West Bank and Gaza Strip,

some of which, such as the Western Basin and the Coastal Basin, extend beyond the borders of the West Bank and Gaza Strip. Thus, the quantitative characterization of water rights has not yet been determined, particularly in the basins extending beyond the borders of the West Bank and Gaza Strip.

As previously mentioned, the military orders imposed by the occupying authorities in the West Bank have led to several restrictions that have limited the ability of Palestinians to develop their resources and access water and sanitation services. These restrictions have limited the amounts of water Palestinians can extract from their groundwater wells, prevented them from increasing their water supply or drilling private groundwater wells, particularly for agricultural purposes, and prohibited the restoration of old wells that were drilled prior to the occupation. As a result, water production from these wells has declined, and the quantities of water supplied to Palestinians for all purposes have been significantly reduced. Furthermore, the occupying authorities confiscated all wells belonging to Palestinians who were forcibly displaced from their land after 1967. These unjust measures continued until the amount of water produced from Palestinian wells did not exceed 50% of drinking water needs. This forced Palestinians to increasingly rely on water purchased from the Occupying State, increasing their dependency and enabling the occupying power to maintain control over Palestinians' access to drinking water. The occupying power uses water as a tool of pressure, at times, to impose collective punishment. They decide when and where water will be supplied, the amount supplied, and the price. For instance, the occupying authorities deliberately reduce the amount

<sup>4</sup> A bilateral agreement was signed between the Hashemite Kingdom of Jordan and the Occupying State, allocating Jordan a share of the Jordan River system. This agreement is not valid between all riparian parties.

of water sold to Palestinians each summer by varying percentages, which can reach more than 50%, in order to prioritize supply to settlements in the West Bank at the expense of Palestinian villages and towns. Consequently, the majority of these towns experience severe water crises and water supply interruptions that can last for weeks, and sometimes for over a month in certain areas.

Although the Occupying State recognized "Palestinian water rights in the West Bank" under the so-called Oslo Agreement, the latter did not specify these rights, their quantity, or their nature. A decision on the entire water issue was postponed to the final stage of negotiations, which were never completed. As a result, the by default expired agreement maintained the status quo regarding water use and management, which strengthened the occupation's control over water resources and paved the way for further control, domination, and seizure of water resources, not to mention reducing what is available to Palestinians in various ways. The so-called Joint Water Committee was formed, requiring any water and sanitation project to obtain the committee's approval before its implementation. The Occupying State exploited this provision to submit water and sanitation projects related to illegal settlements to the Committee for approval, thus granting them legitimacy (The Palestinian Center for Policy Research and Strategic Studies – Masarat, 2021). However, the Committee rejected most of the projects submitted by the Palestinian side and delayed the implementation of many vital projects, such as the construction of wastewater treatment plants, for more than ten years, and some for twenty years or more, since they were submitted in the mid-1990s after the signing of the agreement. It also did not approve the

drilling of any wells for Palestinians in the Western Basin, which is considered the largest basin in terms of production capacity.

With the number of settlers in the West Bank rising to nearly 750,000, distributed across more than 280 settlements, a large portion of land and water resources has been taken over, including more than 80 springs that once supplied water to Palestinians. The Palestinian people have been denied access to these springs, and around 38 groundwater wells have been drilled in the West Bank, producing about 54 million cubic meters annually, all used to serve the settlers (Palestinian Water Authority, 2013). These settlements discharge their wastewater into Palestinian lands and valleys, causing environmental pollution and serious health risks. The construction of the Annexation and Expansion Wall has contributed to the isolation of large areas of land, particularly in the western part of the West Bank, which are of vital importance to the area of the Western Aquifer Basin. The wall isolated dozens of Palestinian wells and caused a reduction in the amount of water available to Palestinians by about 20% of the amount produced from Palestinian wells in the Western Basin (Palestinian Hydrology Group, 2005).

Over the past two decades, the Occupying State has launched six devastating wars on the Gaza Strip, the most recent being the genocide that began on October 7, 2023. These assaults and wars left tens of thousands of civilian casualties and massive destruction across all aspects of life. Residential and public buildings, hospitals, schools, universities, places of worship (mosques and churches), as well as infrastructure related to water, sanitation, electricity, and other essential

services, have been destroyed. Agricultural lands and all elements necessary for life have also been devastated. These actions constitute violations of all international laws, the laws of war, and human rights laws, mainly the right to life and other related rights, such as the right to health, the right to water, and the right to a clean and safe environment.

Based on the above, it has become clear that the Occupying State continues to violate the Palestinian people's right to their resources, depriving them of the ability to exercise sovereignty over these resources and preventing their development and use for the benefit of the Palestinian people. At the same time, these resources are being depleted and exploited to benefit settlers in the West Bank, in violation of international laws, particularly international humanitarian law. Moreover, it continues to control and regulate the sale of water to Palestinians and fails to fulfill its obligations towards the Palestinian people under its occupation, in terms of ensuring their right to access sufficient, high-quality water, on the one hand, and obstructs the measures Palestinians are attempting to take to ensure the exercise of this right, on the other. This negatively impacts the social and economic conditions and the livelihoods of the Palestinian people.

# 06

## THE RIGHTS-BASED APPROACH TO WATER

The natural and philosophical concept of the right to water is rooted in the relationship and practices that peoples adopt toward their water and natural resources. According to Shiva, the right to water in many communities is similar to one's language and customs. It is a right that represents a community's identity and is essential for its survival. Depriving a community of its right to its natural resources and preventing it from managing these resources and means of production undermines the cultural identity that characterizes that community. If it becomes impossible to express this shared identity through the social experiences of cultivating fields, lands, and gardens, and through professions and the transmission of customs and traditions, the cultural level of that community will erode, leading to social isolation, where people's behavior is reduced to merely seeking to meet their economic needs. This imparts the characteristics of a consumer community. Whereas if the social relationship that links communities to water – and food – is respected and protected in the forms it has taken over its history, then water rights will acquire deeper meaning for the community itself, not just for its individuals. In this context, the relationship between waterways and environmental

quality, between soil moisture and types of agriculture, and between food and clothing traditions may be considered. There is also the powerful mythology of identity tied to great rivers around the world, such as the Nile, the Ganges, the Río de la Plata, the Mississippi, the Tigris and Euphrates, and the Jordan River (Shiva, 2012).

From a legal perspective, the concept of the right to water has evolved from being an implicit right mentioned indirectly in international law – such as through its association with the principle of "right to life" or through international covenants such as the International Covenant on Economic, Social and Cultural Rights (ICESCR), and the International Covenant on Civil and Political Rights (ICCPR) – to being explicitly recognized. This shift was solidified with UNGA Resolution 64/292 (2010), which affirmed that access to clean and sufficient water and to sanitation services is a fundamental human right essential for the enjoyment of life and all other human rights.

The rights-based approach to water integrates human rights principles with the right to water. Several relevant and competent bodies have worked to elaborate its content, both in terms of the normative content, which includes five

indicators (availability; accessibility; quality and safety; affordability; and acceptability) (Brown, Neves-Silva, and Heller 2016), and the substantive and procedural content (Dubreuil 2006). According to the latter, the content of the right to water is divided into two categories. The first category includes substantive rights, which relate to technical standards that must be achieved, such as water quantity and quality. The second includes procedural rights, which are the rules and institutions that facilitate the enforcement of substantive rights, such

as access to information, accountability, non-discrimination, and participation in decision-making (IWRM Action Hub 2010). The state, as a duty-bearer, must ensure that every individual enjoys these rights, not allow any third party to prevent them from being enjoyed, and take appropriate measures to guarantee that everyone has access to these rights.

If we look at the actual implementation of the right to water in Palestine, we find the following:

- Practically and economically, it is impossible to guarantee sufficient access to water to meet everyone's basic needs (100 liters per person per day, according to the WHO). The amount the occupation allows to be made available from local sources, in addition to the amount permitted to be purchased from the Occupying State, is far less than the amount needed by the average Palestinian, and varies significantly from one region to another. In some marginalized communities, the daily per capita share does not exceed 10 to 15 liters, while in cities, where available, it reaches approximately 80 liters per person per day. However, water is not available on a daily basis, especially during the summer months due to the reduced quantities sold to Palestinians by the occupying authorities and the prioritization of Israeli settlements in the West Bank at the expense of Palestinian villages and towns. The situation is even more dire in the Gaza Strip, where the genocide has deprived Palestinians of access to sufficient and clean water, with daily per capita share not exceeding 6 liters.
- It is not possible to guarantee that water will not be contaminated, especially given the deterioration of water resources in the Gaza Strip. The UN estimates that approximately 97% of the Strip's groundwater is unfit for drinking due to high salinity and pollution accumulated over decades, dating back to the direct occupation of the Strip. This situation presents a major challenge that the authorities find difficult to address effectively.
- The PA cannot achieve equitable water distribution across all segments of society because it lacks influence or control over water resources, nor over large areas of the West Bank, particularly what is known as Area C, which remains under the control of the Occupying State. The latter fails to fulfill its obligations as an occupying power toward the population under its occupation, as required by international humanitarian law. Furthermore, investment in infrastructure in rural areas of Palestine is lower than in urban areas, negatively impacting the achievement of equitable water distribution.

- Local community participation in decision-making processes related to the right to water remains uninstitutionalized, often limited to minimal or even merely symbolic consultations. Furthermore, there is no clear mechanism for providing timely information, which hinders the effective participation of rights holders in decision-making and prevents constructive accountability towards duty-bearers or the state.
- NGOs play an important role in promoting the principle of equality and ensuring access to water for marginalized groups. There is currently no effective system or law regulating private sector participation in investment or the provision of water and sanitation services in Palestine.

It is essential to emphasize that securing the Palestinian people's right to water falls within the responsibilities of the occupying power, which remains the de facto authority controlling the land and resources, despite the existence of a Palestinian Authority. The PA lacks effective decision-making power on the ground, and lacks the economic capacity to fulfill its obligations. The primary source of general budget revenues is taxes and customs duties, which are completely controlled by the Occupying State. A significant portion of these revenues is withheld under various pretexts, making it difficult to invest in the development of essential infrastructure needed to ensure access to water and improve its quality. As a result, the PA is almost entirely dependent on external aid and funding. The financing gap in Palestine reached approximately \$682 million by the end of 2023, and is expected to rise to \$1.2 billion in 2024 (World Bank, 2024), reflecting the worsening financial crisis facing the PA and the resulting challenges in implementing its entitlements related to the right to water. However, the value of externally funded projects implemented in the water sector reached approximately \$672 million during 2019 and 2020 (Palestinian Water Authority, 2021).

# 07

## THE LINK BETWEEN THE RIGHT TO WATER AND OTHER SOCIAL AND ECONOMIC RIGHTS AND THE CONSEQUENCES OF THE PALESTINIAN PEOPLE BEING DEPRIVED OF THE RIGHT TO WATER

The ICESCR, in Article 11, highlights the close connection between the right to water and other rights, including food production (the right to adequate food), ensuring environmental hygiene (the right to health), securing a livelihood (the right to earn a living through work), and enjoying certain cultural practices (the right to take part in cultural life). However, in water allocation, personal and domestic uses should be prioritized. Priority should also be given to allocating water required to prevent famine and disease, as well as water required to fulfill the core obligations of each of the rights enshrined in the Covenant.

At its twenty-ninth meeting on January 20, 2003, (OHCHR, 2003), the Committee on Economic, Social and Cultural Rights stressed the importance of ensuring sustainable access to water resources for agriculture in order to realize the right

to adequate food. Attention should also be given to ensuring that disadvantaged and marginalized farmers, including female farmers, have equitable access to water and water management systems, including rain harvesting and sustainable irrigation technologies. Based on Article 1, paragraph 2, of the Covenant, which stipulates that in no case may a people be deprived of its "means of subsistence," and that States parties should ensure that adequate access to water is provided for subsistence agriculture and to secure the livelihoods of indigenous peoples.

Article 14, paragraph 2, of the Convention on the Elimination of All Forms of Discrimination against Women stipulates that States Parties shall ensure women's right to "enjoy adequate living conditions, particularly in relation to [...] water supply," in addition to ensuring their right to access to sufficient water for

agriculture and improving livelihoods, as we previously mentioned, according to the decision of the Committee on Economic, Social and Cultural Rights.

In light of the current situation in Palestine and the deprivation of the Palestinian people from their right to water as a result of the policies and measures implemented by the Occupying State, and the inability of the PA to find adequate alternatives or ensure the safety of the facilities and infrastructure that can be established by citizens to enable them to enjoy this right in various areas, this negatively impacts their ability to enjoy other rights. Moreover, the occupation's prevention of Palestinians from establishing water harvesting facilities and its destruction of water infrastructure and facilities, particularly in Area C of the West Bank, constitutes a major obstacle to Palestinians' access to water. From the beginning of 2009 until the beginning of October 2023, the occupying authorities destroyed approximately 832 water and sanitation facilities owned by Palestinians (UN Office for the Coordination of Humanitarian Affairs, 2023), depriving a large number of residents of sufficient water to meet their basic needs. Thus, the Occupying State is not only failing to fulfill its obligations as an occupying power towards the Palestinian people, ensuring their needs and ensuring their right to use available resources, but it is also preventing them from undertaking any activity that might help them secure this right and destroying any projects implemented on the ground. This is in addition to the catastrophic situation facing the Gaza Strip as a result of the ongoing genocide, which has destroyed all aspects of life and violated all human rights, mainly the right to life and other related rights, including the right to water, health, a decent living, and a clean environment.

Therefore, these measures have resulted in the following:

- Deterioration of livelihoods, especially in agricultural areas.
- Deprivation of marginalized groups (especially women) of equitable opportunities to access water.
- Direct negative impacts on public health, food security, education, and human dignity.

# 08

## RESULTS AND RECOMMENDATIONS

It is clear that Palestinians face numerous challenges in realizing their right to water, mainly the Israeli occupation's control over most water resources, preventing Palestinians from developing or renovating infrastructure, the use of water as a tool of collective punishment, and the reduction of water allocated to Palestinians for the benefit of settlements. At the same time, denying Palestinians sovereignty over their land and natural resources limits their ability to manage these resources effectively, preventing them from meeting their basic needs and ensuring their right to water.

Furthermore, Palestinians suffer from severe disparities in water supply between regions, with marginalized communities, particularly in Area C, living on very low quantities of water that do not meet international standards. The situation in the Gaza Strip is also catastrophic, given the ongoing genocide, groundwater pollution, and severe shortages of available water, in addition to the effects of climate change, represented by decreased rainfall levels and rising temperatures. All of this negatively impacts various aspects of life, including public health, livelihoods, food security, and education. It also deprives marginalized groups, especially women, of equitable access to water, which constitutes a direct violation of human dignity and the basic right to water.

Therefore, effective measures must be

taken to enable Palestinians to realize their right to water. This includes strengthening international advocacy efforts by documenting the occupation's violations and submitting them to international bodies, and demanding compensation for the deprivation of natural resources, including water resources. This requires pressure to implement UN resolutions and relevant international and customary laws. Furthermore, water resilience must be strengthened by improving the efficiency of systems, sustainably increasing available quantities, and increasing budget allocations to the water and agriculture sectors in line with their importance. Efforts must also be made to strengthen legal and institutional frameworks by unifying references, activating oversight and accountability mechanisms, and linking laws to fundamental rights.

Community participation and transparency should also be enhanced by involving local communities in decision-making and ensuring accountability mechanisms, with a particular focus on vulnerable groups such as the residents of marginalized areas, women, and small-scale farmers. Additionally, investing in nature-based solutions is essential for enhancing the capacity of ecosystems to store water and improve its quality. These solutions should be integrated into national policies and strategies.

## REFERENCES

- Palestinian Environment Quality Authority. 2024. State of the Environment Report in the State of Palestine. Ramallah.
- B. Shomar, J. Rovira. 2023. Human health risks associated with the consumption of groundwater in the Gaza Strip. *Heliyon*.
- C Brown, Neves-Silva, P and Leo Heller. 2016. The human right to water and sanitation: a new perspective for public policies. *Cien Saude Colet.* 2016 Mar; 21(3): 661-70. doi: 10.1590/1413-81232015213.20142015. PMID: 26960080. <https://doi.org/10.1590/1413-81232015213.20142015>. *Ciênc & Saúde Coletiva*, 21(3): 661-670.
- Celine DUBREUIL. 2006. The Right to Water: from concept to implementation. Marseilles: World Water Council.
- Christopher Ward, Sandra Ruckstuhl, Isabelle Learmont. 2022. The History of Water in the Land Once Called Palestine. Bloomsbury Publishing Plc.
- IWRM Action Hub. 2010. IWRM Tool Box - Human Rights Based Approach - Tool A2.05.
- N. Mahoud, O. Zayed, B. Petrushevski. 2022. Groundwater Quality of Drinking Water Wells in the West. Water.
- OCHA. 2023. Data on OCHA - Data on demolishing and displacement in West Bank. <https://www.ochaopt.org/data/demolition> - Last accessed 1/10/2024.
- OHCHR. 2003. General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant), Twenty-Ninth Session of Committee on Economic, Social and Cultural Rights.
- Palestinian Water Authority. 2013. Status Report of Water Resources in the Occupied State of Palestine - 2012. Ramallah.
- Palestinian Hydrology Group. 2005. Impact of Annexation Wall on Palestinian Water Resources in West Bank. Ramallah.
- Palestinian Water Authority. 2024. Water Harvesting Master Plan. Ramallah.
- UN ESCWA and BGR. 2013. Transboundary Water Resources.
- Wash Cluster. 2024. Wash Cluster Updates, Key Highlights and Critical Issues.
- World Bank. 2013. Area C and the Future of the Palestinian Economy, Report No. AUS2922. Washington D.C.
- –. 2024. Impact of the Conflict in the Middle East on Palestinian Economy. Washington, DC.
- Palestinian Central Bureau of Statistics. 2024a. "Water Tables in Palestine, 2022." Ramallah.
- –. 2024. Palestine Statistical Yearbook, p. 125. Ramallah.
- The Palestinian Center for Policy Research and Strategic Studies (Masarat). 2021. Proposed Policies to Enhance Palestinian Water Security. Ramallah.
- The Palestinian Encyclopedia - Volume 1. n.d.
- AMAN. 2024. General Budget Performance Report 2023. Ramallah, Palestine.
- Birzeit University. 2008. Summary of the Legal System and Legislative Process in Palestine. Birzeit, Palestine.

- State of Palestine. 2018. First Voluntary Review for Achieving the Sustainable Development Goals.
- Palestinian Water Authority. 2021. Annual Report 2019-2020. Ramallah.
- – . 2012. National Water Policy in Palestine. Ramallah, Palestine.
- – . 2018. Website - Surface Water. Ramallah.
- Environment Quality Authority. 2016. First National Communication to the United Nations Framework Convention on Climate Change - Executive Summary. Ramallah, State of Palestine.
- Vandana Shiva. 2012. Water Wars: Privatization, Pollution, and Profit.
- Coastal Municipalities Water Utility. 2022. Annual Report. Gaza.
- FAO. 2025. Economic Impacts of the Destruction of the Agricultural Sector in the Gaza Strip after October 7, 2023.
- Al-Haq Foundation. 2021. Climate Oppression: A Major Tool to Establish and Maintain Israel's Apartheid Regime over the Palestinian People and Their Lands. Ramallah.



**annd**  
Arab NGO Network  
for Development  
شبكة المنظمات العربية  
غير الحكومية للتنمية

### **The Arab NGO Network for Development**

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

P.O.Box Mazraa 5792/14 Beirut, Lebanon

