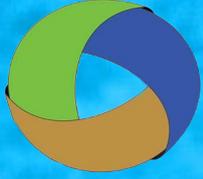


جمهورية العراق



وزارة البيئة

unicef 

for every child



UNICEF IN IRAQ

CLIMATE LANDSCAPE ANALYSIS

FOR CHILDREN AND

YOUNG PEOPLE IN IRAQ



UNICEF IN IRAQ

CLIMATE LANDSCAPE ANALYSIS

FOR CHILDREN AND

YOUNG PEOPLE IN IRAQ

Acronyms

AAP	Accountability to Affected Populations
ADAP	Adolescent Development and Participation
CEE	Climate, Energy, Environment
CLAC	Climate Landscape Analysis for Children and young people
DRR	Disaster Risk Reduction
FAO	Food and Agriculture Organization
GCF	Green Climate Fund
GIS	Geographic Information System
ICO	Iraq Country Office
IDP	Internally displaced person
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
IOM	International Organization for Migration
ITC	International Trade Centre
KRI	Kurdistan Region of Iraq
LTA	Long-Term Agreement
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NGO	Non-governmental organization
OHCHR	UN Human Rights Office
SBC	Social Behaviour Change
SDG	Sustainable Development Goal
UN-HABITAT	United Nations Human Settlements Programme
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCWA	United Nations Economic and Social Commission for West Asia
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization
YPAG	Young People's Advisory Group

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Executive summary

Iraq is ranked 61st out of 163 countries on UNICEF's Children's Climate Risk Index,¹ and the United Nations Global Environment Outlook 6 (GEO-6) ranks it the fifth most vulnerable country to water and food shortages and extreme temperatures.² These rankings reflect the significant climate change risks faced by children in Iraq.

With nearly 60 per cent of Iraqis under the age of 25,³ it is imperative for all stakeholders to work to mitigate the impact of climate change on children and young people's health, education and protection, and empower them as agents of change to secure a prosperous future for the country.

To advance Iraq's efforts to mitigate and adapt to climate change, UNICEF recommends implementing bold measures in support of the Government of Iraq to **PROTECT** children and young people against climate change impacts, **EMPOWER** them to take a leading role in climate change action and **ENACT** climate, environment, energy and disaster risk management interventions that are gender-sensitive and inclusive of the most vulnerable Iraqis.

Iraq has an area of 437,072 square kilometres and a short coastline of 58 km along the Arabian Gulf. Its fertile land, and most of its population, is concentrated between the Tigris and Euphrates rivers. The north is mountainous, while the south consists of marshlands. The country has three climate

zones (desert, semi-arid steppe and Mediterranean) characterized by cool winters and dry, hot summers, with seasonal rainfall and dry, hot winds occurring during specific periods of the year.

In 2020, Iraq had a population of 40 million, with 28 per cent residing in rural areas. The government's primary source of revenue comes almost exclusively from oil.⁴ According to a 2022 analysis, the proportion of Iraqis living below the poverty line increased from one-fifth in 2012* to 30 per cent following the COVID-19 pandemic.⁵ Children are more likely to be affected by multidimensional poverty and a significant number of them belong to female-headed households. Years of instability and insecurity have led to extensive infrastructure damage and a considerable population of displaced people.

Iraq's per capita CO₂ emissions amount to 4.9 metric tonnes per year, with the energy sector responsible for nearly three-quarters of this total.⁶ This does not account for greenhouse gas emissions from the substantial oil and gas produced in Iraq and exported. The energy sector is the main source of in-country greenhouse gas emissions. Most electricity is generated through burning fossil fuels (81 per cent), while hydroelectric power accounts for 19 per cent.⁷ However, electricity demand outstrips power generation, and many rely on diesel generators to compensate for the shortfall.

Persistent and event-based hazards in Iraq related to climate, energy and environment



Higher temperatures: Temperatures in the country are rising up to seven times faster than the global average.



Precipitation changes: Iraq's mean annual rainfall is projected to decrease by 9 per cent by 2050, while intensity is expected to increase⁸ resulting in prolonged dry periods interspersed with intense rainfall events.



Water scarcity: Iraq is among the world's most water-scarce countries. The groundwater level has fallen dramatically, with borehole depths increasing nearly threefold since 1996. River discharge rates have decreased while rising temperatures are increasing** evapotranspiration.



Desertification: Changes in water availability is affecting the native ecosystems, resulting in the depletion of wetlands and decline of vegetation, ultimately turning semi-arid areas into deserts. As of 2020, desertification affected 53 per cent of the country, with 92 per cent of the population being affected by or vulnerable to its consequences.⁹



Coastal degradation: The coastal wetlands suffer from severe environmental degradation. Over the past four decades, water bodies have shrunk to a quarter of their original size and arid zones have tripled. This decline has severe implications for biodiversity, fisheries, marine ecosystems and local livelihoods.

*Launch of the National Multidimensional Poverty Index- Analytical Report Aug. 2023.

** (United Nations Children's Fund, The Coldest Year of the Rest of Their Lives: Protecting Children from the Escalating Impacts of Heatwaves, UNICEF, New York, 2022.) (<https://www.unicef.org/media/129506/file/UNICEF-coldest-year-heatwaves-and-children-EN.pdf>)

CLIMATE, ENERGY AND ENVIRONMENT (CEE) CONTRIBUTE TO THE INCREASED FREQUENCY AND INTENSITY OF EVENTS THAT AFFECT CHILDREN'S WELL-BEING. IN IRAQ, THESE ARE LIKELY TO INCLUDE:



More frequent heatwaves: Iraq is in the highest category globally in terms of child exposure to extremely high temperatures, as all 19.6 million children in the country were exposed in 2020.¹⁰ The impact of heatwaves in Iraq extends beyond the health risks for children, affecting various aspects such as agricultural productivity, evaporation rates and occurrence of wildfires. Additionally, heat waves are associated with increased water and energy consumption as households strive to maintain a comfortable temperature.



More dust storms: Lack of vegetation and drought conditions contribute to loose soil, which can be lifted by the wind, causing dust storms. Between April and May 2022, nine dust storms swept through the country, resulting in thousands of hospital admissions.



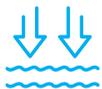
Increasing air pollution: In 2022, Iraq ranked second-worst out of 118 countries assessed in terms of air quality.¹³ Emissions from industry, transportation and electricity generation are the leading sources of air pollutants and are contributing to climate change.



More flooding:* Increased rainfall intensity and reduced vegetation heighten the risk of flooding. Many Iraqi cities are particularly vulnerable to this hazard.



More water pollution: Two-thirds of industrial and household wastewater is discharged untreated, and around 6 million cubic metres of untreated sewerage is dumped into Iraqi rivers daily. Half of household water supply and 40 per cent of water sources test positive for E.coli. Insufficient water quality for irrigation along with mass fish deaths and animal diseases have also affected the region, especially in the southern marshes and surrounding farming communities.^{14,15,16}



Frequent drought: It is projected that six out of nine Iraqi governorates will experience water shortages at least once a year by 2050.¹¹ The governorate of Basra, in the south, is expected to be the most adversely impacted.¹²

The water, health and agriculture sectors face significant exposure to climate change, energy and environment hazards, making them particularly vulnerable. Water scarcity and drought greatly threaten water and agriculture, with knock-on impacts on food security and health. It is estimated that half the population will lack sufficient water, by 2060,¹⁷ while

climate change threatens 92 per cent of agricultural land. The health system has limited adaptive capacity to address future climate change impacts on health. It also lacks monitoring, early warning or emergency preparedness for malnutrition, thermal stress, vector-borne diseases, injuries or airborne and respiratory diseases.

Iraqi children's vulnerabilities to climate change, energy and environment

Children's vulnerabilities to climate change, energy and the environment are exacerbated by gender-related discrimination. and the environment are increased by inadequate Essential services are also affected by climate health,

education, protection and water, sanitation, change, necessitating support to build resilience and and hygiene (WASH) services. These vulnerabilities protect children's rights and well-being.



Water, sanitation and hygiene: Reduced water availability can cause competition and social instability among communities. As water quality declines due to limited water flows, people experiencing poverty and marginalization are more likely to use unsafe water sources, contributing to illness and death. Only 60 per cent of households in Iraq have access to safely managed water sources, with large geographical disparities. Vector-borne and WASH-related diseases pose growing risks, i.e. *Escherichia coli* (E. coli) and cholera. Girls and



young women, who typically bear significant caregiving responsibilities and have specific hygiene needs, are particularly affected.

Health and nutrition: Children in poor health and those who do not receive adequate nutrition in early childhood, are significantly more susceptible to environmental stresses. Iraq's already weak health system increases vulnerability, particularly among children with disabilities and adolescent girls. In addition to water-borne and vector-borne diseases,

*(REACH and United Nations Institute for Training and Research (UNITAR) (2020). Flood hotspots in Iraq (October 2018–March 2019). October 2020. Available from https://www.impact-repository.org/document/reach/19ad1c82/REACH_IRQ_Factsheet_Flooding_trends_in_Iraq.pdf) and (https://repository.impact-initiatives.org/document/reach/19ad1c82/REACH_IRQ_Factsheet_Flooding_trends_in_Iraq.pdf)

dust storms pose risks of respiratory and cardiovascular diseases. Air pollution is a major threat to child health, while extreme weather events put children at risk of physical harm and have mental health impacts. Climate change also impacts food availability and quality, posing risks to health and development.



Education and learning: Education can be an opportunity to build knowledge and resilience to climate change if children are able to access it. Education is also the foundation which enables children and young people to be agents of change and participate in the green economy. Extreme weather events can interrupt education for extended periods, leaving children at a life-long disadvantage and reducing their likelihood of returning to school. In Iraq, 48 per cent of schools already lack access to basic water services.¹⁸ This disproportionately affects girls whose attendance is impacted by access to water for hygiene and sanitation. Children whose education is interrupted are also vulnerable to negative coping practices, such as child labour or child marriage.*



Social and child protection: Climate change exacerbates the vulnerability of already marginalized populations. Families in poverty have less resilience to climate change impacts, experience food insecurity, and may

resort to negative coping mechanisms such as child labour and child marriage. Nearly one in two children in Iraq live in multidimensional poverty, while two out of five Iraqi children face monetary poverty due to the COVID-19 pandemic.^{19,20} This contributes to 7 per cent of children and adolescents aged 5 to 17 years engaging in child labour and 28-per cent of girls married before reaching 18 years of age.²¹ Stress and shocks correlate with higher rates of gender-based violence and the agency of girls and women is undervalued. Iraq already ranks 154th out of 156** countries on the Gender Inequality Index, with an estimated 1.32 million people (75 per cent women and adolescent girls) at risk of various forms of gender-based violence (GBV). Around 77 per cent of GBV incidents are linked to domestic violence, which reportedly increased during the COVID-19 pandemic.^{22,23} Around 200 grave violations against children were recorded in 2022.²⁴ Displaced families, who already have low resilience, are more vulnerable to secondary displacement due to climate change hazards. As agricultural livelihoods and food security are affected by climate change, rural-urban migration is already occurring. The World Food Programme (WFP) reports that before the COVID-19 pandemic, a daily wage could buy 31kg of wheat flour, which has now dropped to 18kg.²⁵

Institutional arrangements, priorities, policies and programmes

Following the ratification of the Paris Agreement in 2021, the Iraqi government has accelerated the development of adaptation and mitigation strategies to access climate finance. The Ministry of Environment is the national focal point for climate change and the environment, overseeing the Climate Change Directorate. Additionally, a special adviser to the prime minister on climate change has been appointed. United Nations agencies, international finance institutions, multilateral climate funds, development partners and civil society support Iraq's efforts to address water scarcity and climate change.

Key policies and programmes pertaining to climate change are not child-centred, and child-focused social sector plans and policies have little acknowledgement of climate change impacts on children.

However, there are opportunities to involve children and young people in the development and revision of government plans and strategies, including the Nationally Determined Contributions (NDCs), the green paper on climate change and the National Adaptation Plan (NAP), and COP28 and subsequent discussions. Similarly, there are opportunities to integrate climate change into social sector strategies that are currently under development or scheduled for review.

*A joint analysis of child poverty in Iraq: [online version of the attached](#).

** (Iraqi Women In Numbers Analyzing the Current Status and Identifying the Way Forward Kapita.iq) and (<https://kapita.iq/storage/app/media/New%20Research%20Publications/Reports/women%20in%20numbers/Iraqi%20Women%20in%20Numbers%20Analyzing%20the%20Current%20Status%20and%20Identifying%20the%20Way%20Forward.pdf>)

Recommendations for **stakeholders** to reduce children's vulnerabilities and build resilience to climate change risks in Iraq

To reduce children's vulnerabilities and build their resilience against climate change risks, UNICEF provides guidance to governments, the United Nations system, civil society and children and young people as agents of change, striving to achieve the objectives of PROTECT, EMPOWER and ENACT.

Fostering gender-responsive and inclusive climate policy development, delivery and reporting at the national level will require a particular emphasis on children and young people with disabilities. This focus is particularly crucial for girls, given their heightened vulnerability to various social and economic risk factors, such as poverty and unemployment, which further exacerbate their susceptibility to adverse impacts.



PROTECT



Water, sanitation and hygiene

Plan, design, innovate and **implement** initiatives to address water scarcity encompassing water use and reuse, and rain catchment.

Improve access to equitable and inclusive water-efficient WASH facilities in schools and health facilities.

Develop consensus on equitable and inclusive water governance and resource management frameworks, actively engaging young people.

Build in-country capacity on water governance, natural resource management and climate change response.



Health and nutrition

Increase focus on health risks and impacts on mothers, newborns, children and young people due to climate change, including investments in surveillance and measures for diseases associated with Iraq's climate risk profile.

Monitor health risks to ensure an early and effective response, especially for mothers, children and young people.

Improve the resilience of health facility infrastructure, including solarization and the use of renewable energy.



Education

Solarize learning facilities and incorporate disaster risk reduction in their design.

Integrate meaningful climate change learning and gender-responsive disaster risk reduction in schools and in life skills curricula, including pedagogical studies for teachers and school administrators.

Teach skills in secondary and higher education which will enable young people's participation in the green economy and enable them as agents of change.



Child and social protection

Integrate climate change into social protection policies and programmes that reflect the evidence on children and young people's vulnerabilities to climate risk, i.e. early marriage, poverty, gender-based violence, etc.

Train family and child care workers to monitor the impacts of climate risk on vulnerabilities and support improved gender-responsive and inclusive social policy schemes to reduce vulnerability.



EMPOWER



Social and behaviour change and the genuine engagement of children and young people as agents of change

Prioritize children and young people in strategies, policies, and programme design, planning, innovation and implementation.

Enhance public understanding and change behaviours around climate change through gender-transformative programming, acknowledging that 60 per cent of Iraqis are under the age of 24.

Recognize young people as agents of change in climate change action; build their ideas, innovations and actions for adapting to and mitigating climate change impacts into sectoral strategies, policies and programmes.



Data and evidence

Generate evidence with the active involvement of children and young people concerning the intersection of children, young people and climate change. Evidence can be used to **inform** mitigation and adaptation measures, recognizing the variability in vulnerability to climate risks among children and young people.

Utilize participatory research methodologies involving children, young people and climate-affected populations.

Monitor gender-related indicators and their correlation with climate risks.



ENACT



Climate-sensitive operational procedures and practices

Effectively **use** private sector corporate sustainability to finance renewable energy solutions; address water scarcity, desertification and other climate risks.

Promote sustainable energy through sustainable procurement and climate safeguarding for programmes, including, but not exclusive to, construction, supply chain transport, warehousing and other organizational operations of vendors that impact emissions.

Shape local renewable energy markets by promoting local procurement; **facilitate** access to regional and global markets for the Iraqi renewable energy private sector.

The United Nations and its partners **promote** green premises management to reduce emissions and improve internal water management, sanitation, energy consumption and other measures.

PROTECT



1

Institutionalize data generation, analysis and use regarding children, young people and climate change to mitigate and adapt to climate risks

PROTECT and EMPOWER

2

Empower young people as agents of change in school, universities, work and communities to design and implement sustainable climate policies, innovations, and investments for Iraq



PROTECT, EMPOWER and ENACT



3

Improve water quality and sanitation and address water scarcity for human consumption

4

Advocate for renewable energy financing mechanisms and implement renewable energy solutions to mitigate and adapt to climate risks for children and young people; and strengthen local markets

Principles:

- Gender-sensitive and inclusive of the most vulnerable Iraqis
- Evidence-informed
- Child rights-based
- Economically, socially and behaviourally sustainable and
- Ethically accountable via safeguarding our operations and partnerships

Recommendations for UNICEF in Iraq to enhance its climate change response

Based on the UNICEF Strategy for Climate, Environment, Energy and Disaster Risk Management (2022–2030), and the global action plan for climate change action, UNICEF identifies

six priorities and areas of comparative advantage supported at regional and global levels to PROTECT, EMPOWER AND ENACT for children and young people.



PROTECT



Generate data and evidence

Conduct analysis and **generate** accurate and relevant information to enable us and our partners to effectively prioritize children most in need, in the most efficient way.

Incorporate climate considerations into the Multiple Indicator Cluster Survey (MICS) 2023 and **integrate** the collected data into the new country programme processes.

Develop climate rationales in support of Iraq in addressing climate-related challenges.

Build internal capacity to monitor environmental and social safeguarding and climate change impacts.



Implement resilient services at scale and deliver supplies

Demonstrate effective and efficient water and sanitation interventions, **reduce** household water consumption, and **implement** innovative solutions to reduce water scarcity.

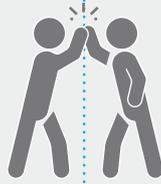
Design integrated programmes that reflect the WASH-climate change shift, **document** environmental sustainability, and **evaluate** WASH pilots.

Support school curricula, pedagogical studies, and life skills within the green economy.

Develop and **implement** effective social and behaviour change interventions targeting young people and decision-makers.

Monitor the impacts of climate on children's health, **adapt** guidance and **build** skills to ensure appropriate coverage and access to health services.

Implement clean energy in schools and health facilities.



EMPOWER



Strengthen capacity of partners

Work with communities, governments and public and private institutions to better understand climate risks, the green transition, and strategies for **building resilience** to disasters and longer-term climate and environmental shocks.

Engage climate change specialists, including those within the Ministry of Education, Ministry of Youth and Sport, Ministry of Construction, Housing, Municipalities and Public Works, and collaborate with partners, including the Ministry of Labour and Social Affairs, Ministry of Planning, Ministry of Justice, Ministry of Health and other relevant areas.

Engage with youth-led groups to build their capacity to enact inclusive, gender-responsive climate plans and promote job opportunities in the green economy.



Advocate for children and young people

Utilize UNICEF's voice and credibility so that decision-makers act in the best interests of children, and establish an enabling environment that directs climate and environmental policies toward children and secures sustainable financing.

Develop, implement and monitor an inclusive and gender-responsive climate change advocacy strategy that actively addresses key areas of UNICEF intervention.

Lead advocacy efforts for children and young people as agents of change with partners in government, academia, non-governmental organizations and the United Nations.



Support children and young people

Ensure that the voices, perspectives and ideas of children and young people are heard at the highest levels and that they get the education and skills necessary to act as agents of change in their communities.

Collaborate with green youth-led organizations, including women and girl-led organizations, schools, vocational and university programmes, and youth advocates to promote their active engagement in national policymaking processes.

Create pathways for young people to become more effective champions for sustainability, including through facilitating youth's access to green economy jobs.



ENACT



Develop and shape markets

Convene and foster new partnerships between the private and public sectors to create shared value and sustainably provide goods and services. Mobilize the broader business community to contribute to addressing climate and environmental risks and disasters.

Green contracting, green facilities management, green staff operations and safeguarding, with emphasis on the renewable energy sector.

The UNICEF country programme's current contributions to reducing children's vulnerabilities and building their resilience to climate change risks in Iraq

PROTECT



Water, sanitation and hygiene

Providing clean and safe water and sanitation to vulnerable populations, bridging between humanitarian support for populations affected by conflict and building resilience against water scarcity, particularly in the southern regions. Climate-resilient WASH systems and services have been piloted in partnership with local governments and water authorities.



Health and nutrition

Building resilient and climate-smart health facilities, reducing vulnerabilities through immunization reforms, supporting maternal, newborn and child health, providing nutrition assistance and strengthening health systems including integration of solar power in healthcare facilities and cold chain management. A gap remains in terms of response to emerging health risks caused by climate change.



Education

Supporting resilient and sustainable education systems including education sector planning, ensuring access to learning, enhancing the quality of education through community oversight and teacher development plans; promoting school solarization and access to water. A gap remains in incorporating climate change and disaster risk reduction in curricula and in school design, site selection and construction.



Child protection

Improving institutional frameworks for child protection, increasing gender-sensitive child protection services, promoting attitudinal and behavioural changes regarding violence against children and women, and identifying and protecting the most vulnerable children and young people.



Social policy

Establishing shock-responsive social-protection systems supported through technical expertise and multi-sectoral partnerships that build capacity and support household adaptation strategies, and advocate for targeted food distribution and fortification.

EMPOWER



Adolescent development and participation

Supporting youth engagement through integrated cross-sectoral approaches enabling young people to become climate and environmental agents of change.



Social behaviour change and community engagement

Developing a comprehensive social and behaviour strategy related to climate change, aiming to facilitate longer-term social change and generate demand for climate-safe practices.



Advocacy and communication

UNICEF's advocacy strategy aims to engage young people, sensitize the public to ask for climate change action, and advocate for inclusive child- and youth-sensitive policies on water management and climate change adaptation.

ENACT



Green safeguarding

UNICEF incorporates green safeguarding measures in its contracting processes to reduce carbon footprints and promote environmentally friendly practices.



Darbandikhan dam in Sulaymaniyah, Iraq.

1. Climate, environment and energy

1.1 Background

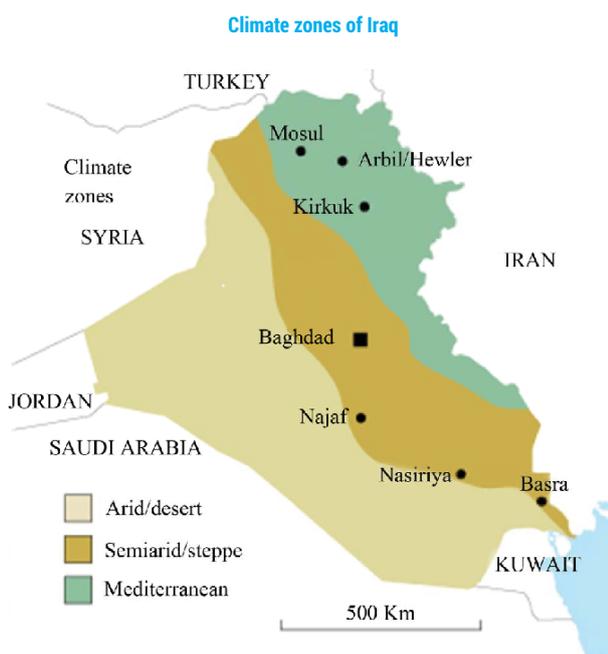
1.1.1 Physical geography and climate

Iraq has an area of 437,072 square kilometres and borders Iran, Turkey, Syria, Jordan, Saudi Arabia and Kuwait. The country has a small coastline of 58 km along the Arabian Gulf, and shares rivers and access to surface water with Turkey, Syria, and Iran.²⁴ About a quarter of the territory is fertile land (mostly between the Tigris and Euphrates Rivers), 40 per cent is rocky desert, 30 per cent is mountainous (in the northeast), while the south is marshlands.²⁵

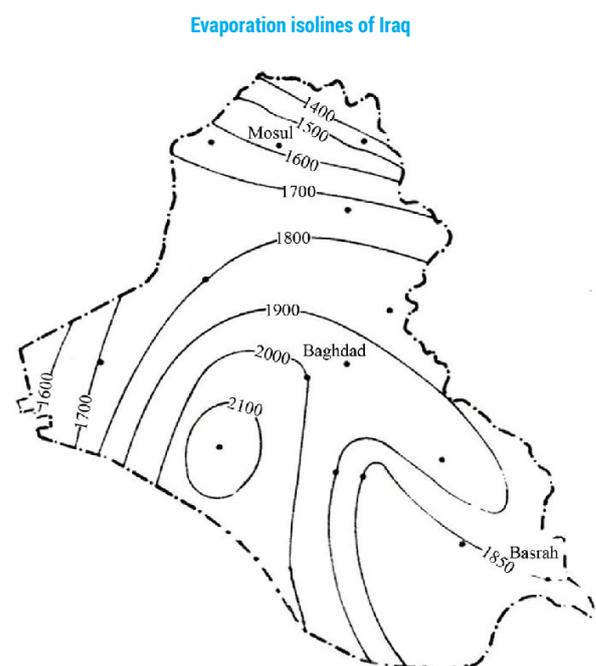
There are three predominant climate zones. The south and southwest comprises arid lowland desert; the centre, where the population is concentrated, is largely semi-arid steppe, while the north and northeast are Mediterranean regions.²⁶

This translates to cool to cold winters and dry summers that range between hot and extremely hot. Rainfall is seasonal, and generally occurs between October and April. The mean annual rainfall is 150–200 mm, with significant variations: the south can get 100 mm, while the northeast may get 1,200 mm.²⁷ Hot dry winds at various times of year also influence the climate. The evaporation rate averages 1,900 mm per year, with higher rates in the south reaching 2,100 mm per year. The mean temperature is 35°C but can reach highs of 50°C in the summer and lows in the 10s during the winter.^{29,30}

1.1.2 Demography and economy



Source: Al-Ansari et al. 2019



Source: Al-Ansari et al. 2019

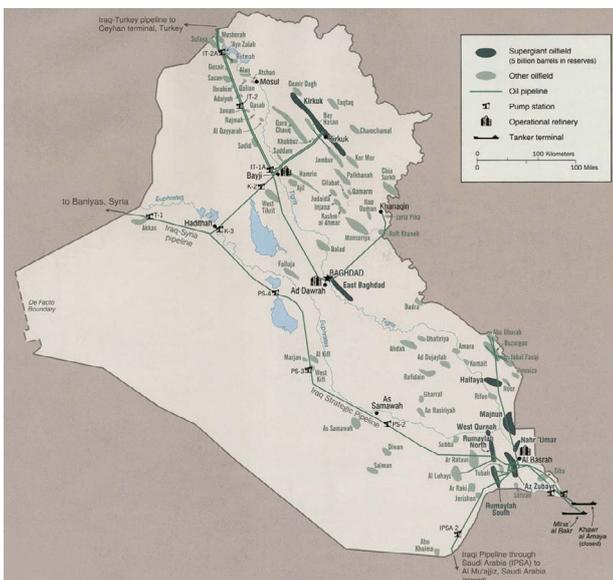
In 2020, Iraq had a population of 40 million, of whom 28 per cent were rural-dwellers. The largest city is the capital, Baghdad, with a population of over 7 million. The region between the Tigris and Euphrates rivers is also densely populated.³¹ The country's population growth rate stood at 2.30 per cent in 2020, higher than the global average of 1.05 per cent. Youth and adolescents account for 60 per cent of the population.³²

Government revenues come almost exclusively from oil and are deeply vulnerable to market volatility.³³ The economy is, therefore, highly vulnerable to shocks, such as COVID-19, and is further affected by national electricity shortages and water scarcity. The economic outlook has improved following the pandemic, driven by rising oil output and recovery in non-oil sectors.³⁴

A 2017 multidimensional poverty analysis by the United Nations Economic and Social Commission for West Asia (UNESCWA) estimated a medium level of poverty (47 per cent), with widespread child poverty.³⁵ A 2022 analysis found that while a fifth of Iraqis were under the poverty line in 2012, this reached 30 per cent after the COVID-19 pandemic.³⁶ The analysis finds children are more likely to be in multidimensional poverty and attributes resource poverty to lack of work opportunities, combined with poor public investment in social services (health, education and social security).³⁷ Children belonging to female-headed households are more vulnerable to multi-dimensional poverty.

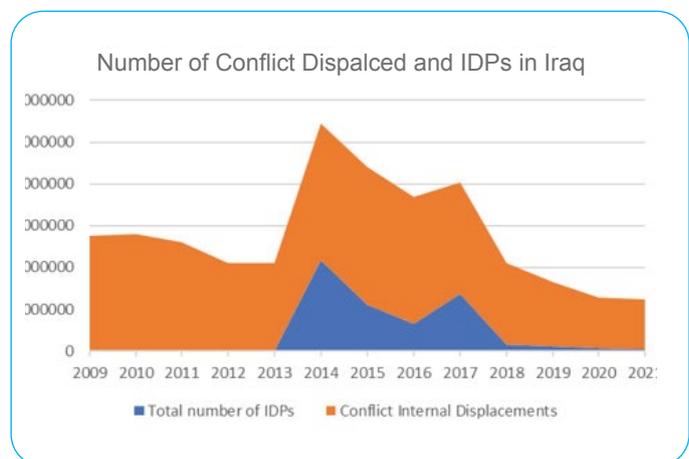
Iraq has experienced at least three distinct waves of political instability since the US invasion in 2003 which led to severe damage to infrastructure and large numbers of internally displaced people (IDPs).³⁸ As of December 2022, Iraq had 1.2 million IDPs, of whom over a million live outside camps, including 370,000 in informal sites with limited access to services.³⁹ In 2022, a growing number of Iraqi citizens, most of them children, began returning from Syria and many are in need of support to access services, reintegrate into society and rebuild social networks.

Map of oil industry locations in Iraq



Source: Inter Group

Total number of IDPs due to conflict in Iraq, between 2009 and 2021



Source: IDMC

1.1.3 Energy

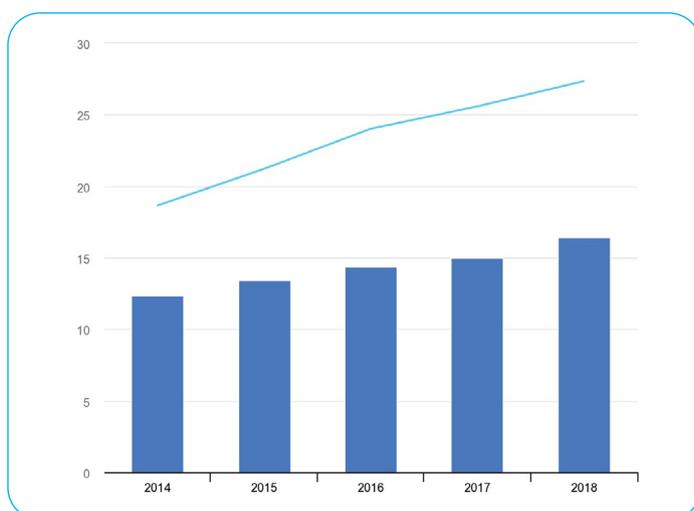
Electricity

The public grid is the electricity source for 98 per cent of Iraq's population but it cannot support current demand, leading to daily power outages.^{40,41} Power outages have been exacerbated by Islamic State attacks on power infrastructure. Much of the population, especially in rural areas, is reliant on diesel-powered generators to make up the shortfall, especially in urban areas. This further contributes to air pollution as well as greenhouse gas emissions.

Electricity generation relies on imported natural gas from Iran, which generates as much as 45 per cent of the daily consumption of 14,000 megawatts. Iraq's electricity demand is set to double from 2020 to 2030.⁴²

Greenhouse gas emissions and renewable energy

Peak demand and maximum power supply from the grid in Iraq 2014–2018.



Source: IEA

In 2019, Iraq's per capita CO₂ emissions amounted to 4.9 metric tonnes per year.⁴³ This does not account for greenhouse gas emissions from the substantial amounts of oil and gas produced in Iraq and exported.

The energy sector is the predominant source of greenhouse gas emissions within the country, generating almost three-quarters of CO₂ emissions.⁴⁴ Most electricity is generated through burning fossil fuels (81 per cent), while 19 per cent is from hydroelectric power.⁴⁵

Iraq is now attempting to transition from oil to gas for electricity generation and imports gas from Iran to make up its deficit. In 2018, Iran cut gas exports to Iraq, which, in combination with sanctions on Iran, has complicated trade relations between the countries.

In 2021 Iraq flared roughly 45 per cent of its 2.8 bcf/d of gas production,⁴⁶ and ranked second in the world in the amount of gas flared in 2020. International oil companies have committed to end flaring by 2027.

Iraq has been a member of the Regional Centre for Renewable Energy and Energy Efficiency since 2008. It adopted a National Energy Efficiency Action Plan in 2013 and is working to increase the share of renewable energy by 2025.⁴⁷ However, hydropower is susceptible to droughts, while solar power is currently in its infancy.

Since 2018, the Basra Gas Company has scaled up capture and processing of dry gas for power generation.

1.2 Persistent CEE hazards

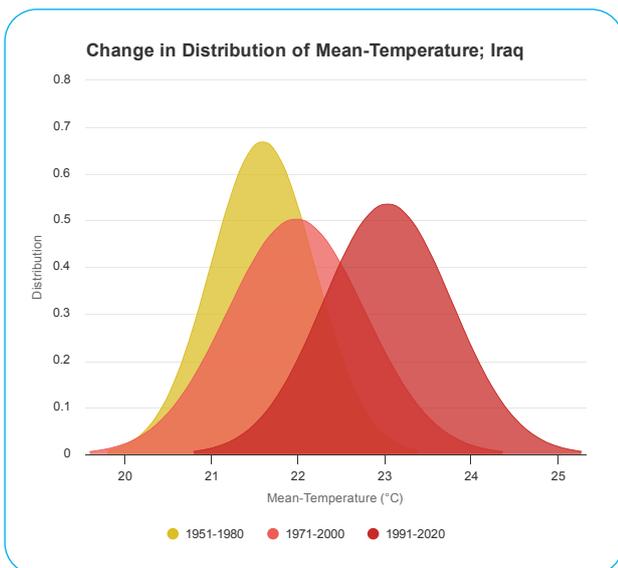
Persistent hazards result from the processes of climate change, environmental degradation and pollution. While these contribute to the intensity and frequency of extreme events, they represent a 'new normal' unless addressed through mitigation and adaptation measures.

1.2.1 Higher temperatures

The United Nations Global Environment Outlook 6 (GEO-6) ranks Iraq as the fifth-most vulnerable country to decreasing water and food availability and extreme temperatures.⁴⁸ Temperatures in the country are rising up to seven times faster than the global average.

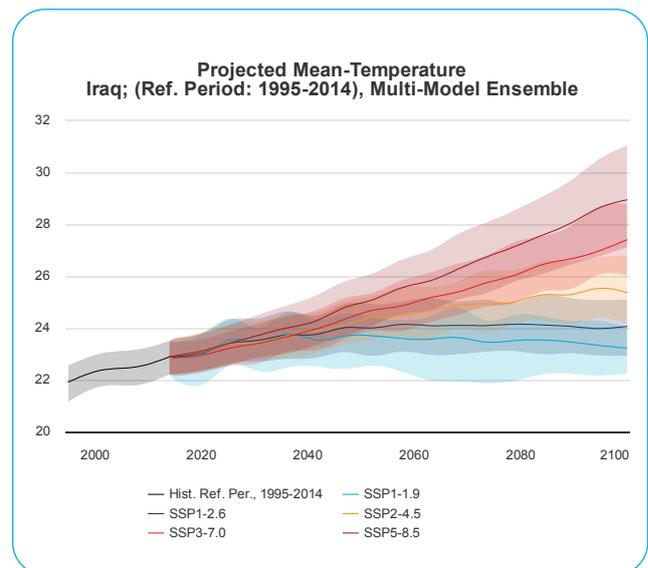
The World Bank Climate Portal projection for Iraq shows stark increases in temperature over the past seven decades, and projects mean temperatures to rise further over the course of this century, under most climate change scenarios and time horizons.⁴⁹ By 2050, Iraq's average annual mean temperature is expected to rise by 2.5°C and the number of days that are hotter than 35°C will increase by 24 days.⁵⁰

Change in distribution of mean temperature in Iraq



Source: World Bank Climate Change Knowledge Portal

Projected mean temperature in Iraq based on possible societal development and policy paths (SSP) from sustainable pathways (SSP1) to fossil-fuelled development pathways (SSP5 and beyond)

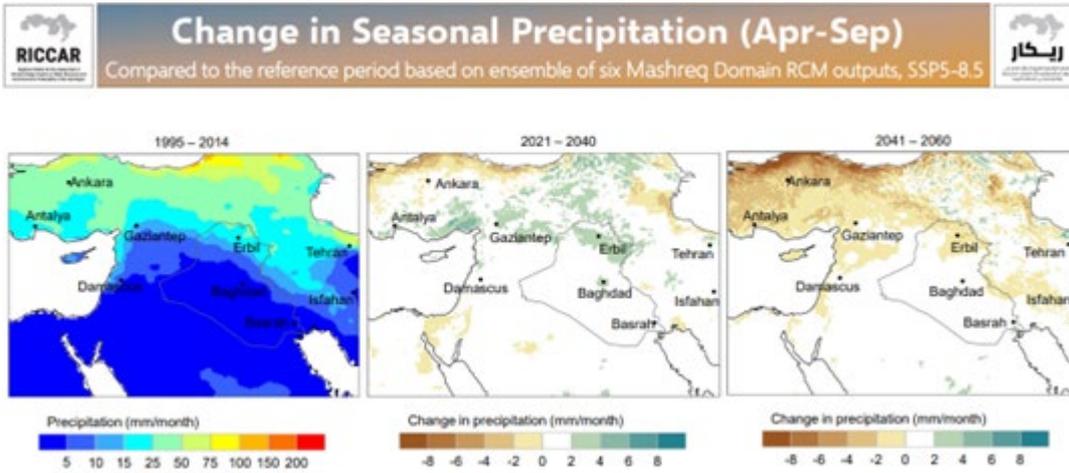


Source: World Bank Climate Change Knowledge Portal

1.2.2 Less rain but more intense rainfall

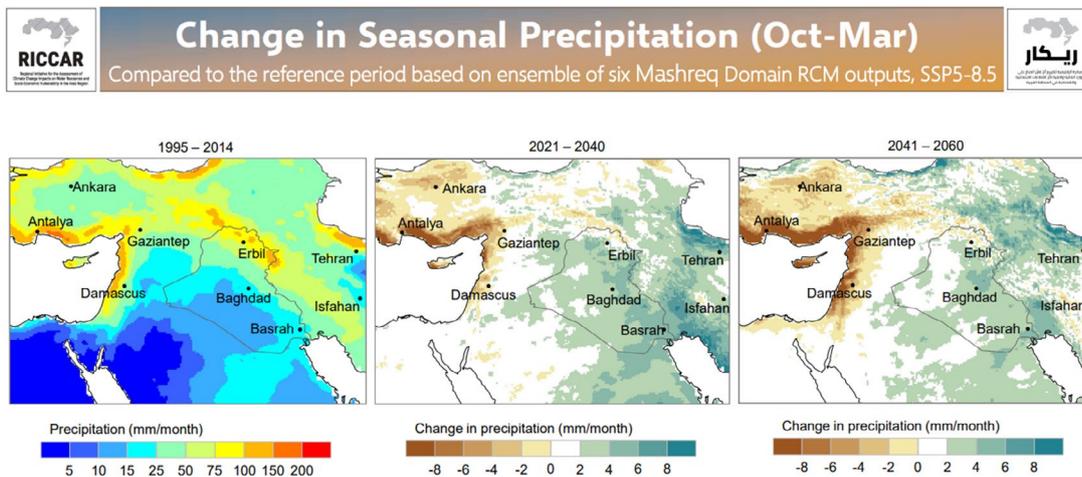
Projections suggest that Iraq's mean annual rainfall will decrease by 9 per cent but intensity will increase by 2050.⁵¹ The UNESCWA RICCAR model⁵² suggests that there will likely be extended periods of drought, with more intense rainfall events. Seasonal precipitation will decline between April and September but will increase between October and March,⁵³ indicating that annual rainfall will be increasingly concentrated in the rainy winter season and increase risk of flooding.

Seasonal precipitation based on the SSP5-8.5 Model for the dry season (Source: RICCAR).



Source: RICCAR

Seasonal precipitation based on the SSP5-8.5 Model for the rainy season (Source: RICCAR).



Source: RICCAR

1.2.3 Water scarcity

Iraq is among the world’s most water-scarce countries. Key drivers are: limited available water resources and precipitation; increasing water demands by all users; high population growth; high dependence on transboundary waters; destruction of vital infrastructure in conflict, and lack of capital investments; highly subsidized domestic water tariff (one of the lowest globally); high non-revenue water (water that is lost before reaching the consumer); deteriorating water quality due to pollution; and underperforming water governance and institutions.⁵⁴

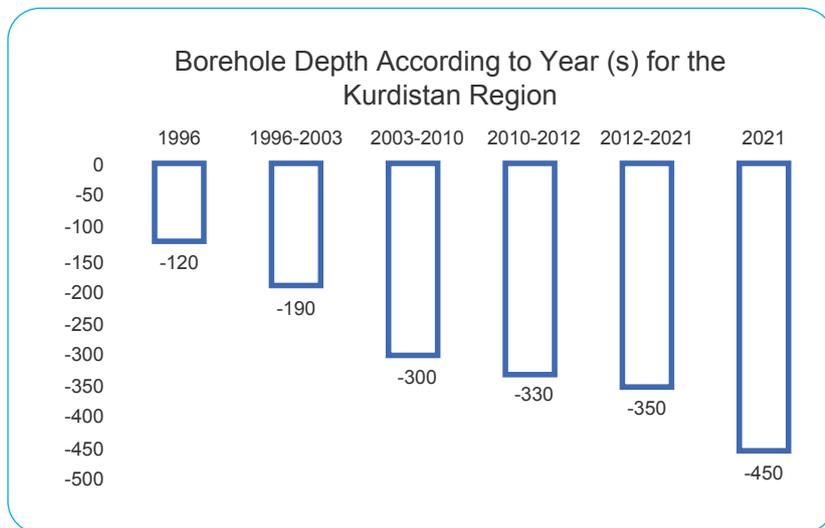
Climate change is compounding the challenges of water scarcity. The National Strategy for Water and Land Resources in Iraq⁵⁵ completed by the Ministry of Water Resources in 2015 estimates that a temperature increase of 1°C and a 10 per cent decline by 2050 will reduce freshwater availability by 20 per cent, causing water delivered to agriculture to decline by 25 per cent. In this case, nearly a third of irrigated land will have no water by 2050. Groundwater accounts for 7 per cent of the water used nationally, though it accounts for 65 per cent of potable water in the Kurdistan Region of Iraq (KRI).⁵⁶ The water table has already fallen significantly and groundwater recharge from surface water from the river systems, and rainfall along the aquifer recharge basin, will be affected by climate change.

Surface water is the primary source in the rest of Iraq, mainly from the Euphrates and Tigris rivers. However, the discharge rates of the two rivers has decreased over time, from over 2,500 m³/s before 1973 to below 1,500 m³/s on the Tigris and below 1,000 m³/s on the Euphrates. This is due to changes in precipitation and evaporation, and upstream dams in Turkey, Syria and Iran.⁵⁷

Only 60 per cent of households in Iraq have access to safely managed water sources. There are large geographic disparities in access to water; for example, in Anbar governorate, Only 27 per cent of households have sufficient quantities of water. Across Iraq, only 27 per cent of wastewater is treated before disposed.

1.2.4 Desertification

Changing depth of wells (metres) in KRI from 1996 to date



Source: UNICEF Iraq

Changes in water availability will impact on native vegetation. Iraq is already seeing drying wetlands and lakes, loss of wetland vegetation and consequent desertification. This further increases the amount of dust released into the air and removes natural flood barriers. Decreased plant life in semi-arid and arid regions will cause dust storms to grow in frequency and magnitude. In 2020, desertification affected 53 per cent of the country, and 92 per cent of the population suffered or was at risk from its effects.⁵⁸

1.2.5 Coastal degradation

Iraq has a relatively short coastline of 58 km, at the point where the Tigris and Euphrates rivers meet to flow into the Arabian Gulf.⁵⁹ This region has historically comprised of wetlands, but the low discharge rate has created a negative flow, causing seawater incursion.

Wetlands are critical environments for migratory birds, sustain freshwater fisheries and marine ecosystems of the Arabian Gulf. Over 40 years, water bodies and natural vegetation have declined to a quarter of their original extent while the agricultural zone has declined by 17 per cent. Meanwhile arid lands have nearly tripled in this region, from 4,257 km² in 1977 to 11,883 km² in 2017.

Regions along the Gulf, such as Basra, will be impacted by sea level rise. This will likely lead to displacement, further driving urbanization and overstretched services.

Changes in the southern marshlands between 1977 and 2017

Area	1977 (km ²)	2017 (km ²)	Change
Water bodies	3173.92	753.79	▼ 76%
Natural vegetation	5898.54	1486.16	▼ 75%
Agricultural areas	4600.95	3806.72	▼ 17%
Arid zone	4257.31	11883.47	▲ 179%

Source: adapted from data provided by Dr Zubaida Rifiat

1.3 Event-based hazards linked to CEE

Since 1954, 29 natural hazard events have been recorded in Iraq.⁶⁰ These have primarily been climate and hydrological events, such as flooding, droughts, and dust storms, and have affected 8 million people. These adverse weather events and natural hazard events are likely to increase in frequency and intensity because of climate change. Natural hazards can lead to internal displacement: at the end of 2021, 9,400 people were displaced due to drought, flash floods and fires.⁶¹

1.3.1 Increased intensity and frequency of heatwaves

As temperatures increase and recovery times between periods of high temperature shrink, heat waves become more common as global temperatures rise due to factors such as climate change, the intervals between warming episodes decrease, leading to more frequent occurrences of heat waves. The relationship between rising temperatures and the frequency of heat waves. A UNICEF report places Iraq into the highest category for child exposure to extreme high temperatures,⁶² estimating that all 19.6 million Iraqi children were exposed to high heatwave frequency and duration in 2020, while 19.3 million were exposed to extreme temperatures. Heatwaves affect agricultural productivity, increase evaporation rates and wildfires, and are linked to increased water and energy consumption as households look to stay cool. During heatwaves, households often use more water for activities such as drinking and cooling, and may also increase energy consumption by running fans or air conditioning units to mitigate the heat. This increased demand for water and energy could lead to a strain on resources and infrastructure, especially in areas already experiencing environmental stress.

1.3.2 More flooding

Increased rainfall intensity increases risk of flooding while vegetation loss can exacerbate the severity of floods.⁶³ Since 1988, 17 flooding events are recorded as having affected over 500,000 people.⁶⁴

1.3.3 Frequent drought

A 2013 study of nine governorates predicted that six would have water shortages at least once a year by 2050,⁶⁵ while the Global Facility for Disaster Reduction and Recovery projects droughts will occur every five years. Muthanna, Basra and Anbar governorates are particularly vulnerable to drought, and Basra is expected to be worst affected by water scarcity.⁶⁶

1.3.4 More dust storms

Drought conditions, along with land-use changes in arid and semi-arid conditions, make loose soil available to be lifted by wind, contributing to more frequent and intense dust storms. In Iraq, loss of vegetation and desertification is the leading cause of dust storms.

From 1980 through 2015, Nasiriya experienced 7.8 days of dust storm activity, while Baghdad and Basra experienced 3 and 2.3 days respectively.⁶⁷ Between April and May 2022, nine dust storms swept through the country, closing government offices and airports, stifling economic activity, and hospitalizing thousands of people.

1.3.5 Increasing air pollution

In 2022, Iraq had the second-worst air quality in the world of 118 countries assessed,⁶⁸ with an average AQI of 164, and 16 times the WHO guideline value for PM_{2.5} concentration. Emissions from industry, transportation and electricity generation are the leading sources of air pollutants, as well as contributing to climate change.⁶⁹ Desertification also contributes to particulate pollution.

1.3.6 More water pollution

Two-thirds of industrial and household wastewater is discharged untreated, and around 6 million cubic metres of sewerage is unprocessed and dumped into Iraqi rivers daily. Half of household water supply and 40 per cent of water sources test positive for E.coli. Insufficient water quality for irrigation, mass fish death and animal disease are also affecting the region with increasingly frequency and intensity, especially in the southern marshes and surrounding farming communities.^{70,71,72}

1.4 Sectors with high exposure to CEE hazards

The Intergovernmental Panel on Climate Change defines exposure as the “nature and degree to which a system is exposed to significant climate variations.”⁷³ Exposure can be due to a change in climate conditions or in climate variability, including the magnitude and frequency of extreme events.⁷⁴

Climate sensitivity is the degree to which a system responds to or is affected by climate change. To assess the impact of climate change, exposure to climate change hazards is multiplied by the system’s sensitivity to exposure, taking into account adaptive capacity, i.e. capability to adjust to climate change.



Exposure in the water sector

Iraq's groundwater and surface water systems are highly vulnerable to drought, with low adaptive capacity and, therefore, are highly sensitive to climate change. Water availability will be impacted by temperature rise, decreased precipitation, changed rainfall intensity, increased evaporation and more frequent droughts. These will reduce groundwater recharge, accelerate the fall of the water table and reduce surface water quantity and quality. These impacts will occur in combination with increased demand for water resources due to population growth and movement. By 2060, it is estimated that half the population will not have enough water.⁷⁵

Exposure in the agriculture sector

The primary water user in Iraq is agriculture, accounting for 63 per cent of available freshwater. Irrigated agriculture is the primary method of food production, followed by pastoralism and dryland farming.^{76,77}

Climate exposure risks associated with agriculture in Iraq include temperature rise, declining rainfall and changing rainfall patterns, changes in the quality and salinity of water, droughts and floods. Dust storms also adversely affect agriculture, reduce productivity and increase food insecurity.

Climate change threatens 92 per cent of agricultural land. Internal rural-to-urban migration is primarily caused by the collapse of rural employment opportunities, which, in part, occurs when there is insufficient water for agricultural farmland. In the future, this will drive massive domestic and, potentially, international migration flows.

Food security is already a concern in Iraq; it is estimated that approximately 1.77 million people are susceptible to food insecurity.⁷⁸ In 2021, 37 per cent of farmers reported wheat crop failures, and 30 per cent reported barley crop failures.⁷⁹ Drought also severely impacts on pastoralists, as crop failures push up the cost of water and feed, and water scarcity contributes to waterborne diseases among animals. Flooding is also a critical risk to agricultural productivity.

Small-scale farmers and nomadic communities are the least able to absorb the shocks to their incomes created by droughts and are, therefore, the most severely affected.

Exposure in the health sector

Climate change exposure risks to health include drought, dust, sandstorms, decreased precipitation, changes to air and water quality, rising temperatures, flash floods and shifts in rainfall patterns.

With decreased water quantities, water quality will decline further. Changes in temperature and precipitation patterns will likely lead to changes in the reach of disease vectors, while floods can carry a host of water-borne diseases.

The health system in Iraq has limited adaptive capacity for future climate change impacts on health, or for monitoring, early warning or emergency preparedness for malnutrition, thermal stress, vector-borne diseases, injuries or airborne and respiratory diseases.⁸⁰

The increased frequency of dust storms has caused air quality to decline. Dust storms can also cause acute respiratory failure and exacerbate chronic respiratory diseases such as asthma and chronic obstructive pulmonary disease, and carry biomaterials such as bacteria, viruses and fungi.⁸¹



A child sits in his father's boat in Shat Al Arab, Basra, Iraq

2. Children's vulnerabilities to climate change

Iraq ranks 61st out of 163 countries on UNICEF's Children's Climate Risk Index.⁸² This high risk is evaluated based on the threats of climate change, as explored in the previous chapter, and vulnerability to these threats. The severe threats that Iraq faces due to water scarcity, extreme temperatures, dust storms, flooding and drought are multiplied by high poverty, vulnerability and fragility of services, along with longstanding insecurity and political turmoil.

With nearly 60 per cent of Iraqis under the age of 25,⁸³ it is imperative to mitigate the impact of climate change on their health, education and protection, while promoting Iraqi children and young people as agents of change to secure a prosperous future for the country.

Children and young people's vulnerabilities are heavily shaped by existing marginalization along the lines of gender, disability, displacement and poverty. Girls and women are differentially, and often more severely, affected by climate change impacts, while children living with disabilities face greater challenges in accessing shelter and services in disasters, and risk permanent lack of access.

Without adequate health and nutrition, access to WASH, education and social protection, children are caught in a vicious cycle of increasing exposure and vulnerability and thus increasing risk.

Extreme events such as storms, floods and heatwaves severely impact on basic services. For instance, extreme rainfall can overwhelm water systems and destroy infrastructure, disrupt services and cause physical harm. Dust storms can cut children off from critical services.

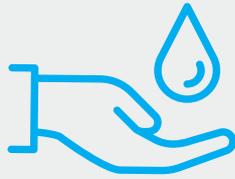
Climate change also increases the cost of public services, leading to increased competition for public funding and further impacting on quality and availability. At times the gap is filled by poorly regulated private services of uncertain quality.

2.1 Water, sanitation and hygiene

A changing climate is increasing the vulnerability of children to climate and environmental hazards, shocks and stresses due to lack of access to safe WASH services. Lack of access to WASH and exposure to climate shocks leads to ever worsening WASH outcomes.

Iraq is the 42nd most water-stressed country in the world.⁸⁴ WASH provision in many parts of the country is already inadequate, with aging water supply systems that are unable to keep up with the water scarcity and falling groundwater, environmental degradation especially in the marshlands to the south, unclear lines of responsibility and years of conflict.

Changing rainfall patterns, increased temperatures, and adverse weather events are impacting on the quality and availability of water, even as population movements and increased consumption are causing demand for water resources to grow. Iraq is yet to pass a national-level policy to manage its limited water resources effectively.



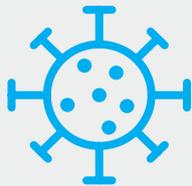
Water availability

Reduced water availability due to low recharge rates of groundwater and decreased surface water can cause competition between communities and other users in agriculture and industry. This can lead to tensions, impact on agricultural productivity and livelihoods and lead to families resorting to negative coping mechanisms.

Water quality



As water quality declines, people experiencing poverty and marginalization are more likely to use unsafe water sources. This contributes to morbidity and mortality, particularly in children and young people. Limited water flows in river systems and negative flows are increasing salinity, which is linked to bacterial infections such as cholera.^{85,86}



Diseases linked to WASH

Population growth, migration and displacement have already led to increased diseases linked to WASH such as tuberculosis, hepatitis A, cholera and measles.⁸⁷ Vector-borne diseases such as dengue, haemorrhagic fever and malaria also pose growing risks as water flow patterns change.

Impacts on girls and young women



Adolescent girls already shoulder significant household and caregiving responsibilities. As WASH-linked diseases increase, inequitable burdens on girls to take care of the sick and elderly can grow and lead to reduced school attendance, drop out, and time poverty. Girls also have specific hygiene needs due to menstruation which are harder to accommodate when water is scarce.

2.2 Health and nutrition

Children in poor health and those who do not receive adequate nutrition in early childhood, are significantly more vulnerable to environmental stresses. Weak health systems that already struggle to provide adequate care will be increasingly strained as climate change brings new risks like diseases related to WASH. Climate change and air pollution threaten children's health from before birth and the effects accumulate over the lifetime.

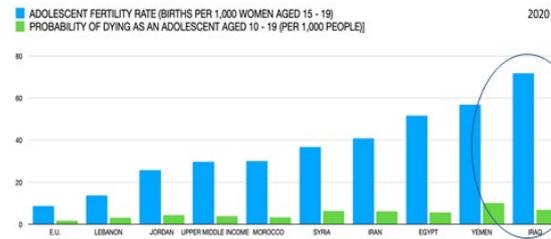
Iraq has weak public services, with amongst the lowest availability of nurses, midwives, physicians and hospital beds per 1,000 people in the region. This increases the vulnerability of girls and boys, and the lack of maternal health services particularly impacts on adolescent girls in a context where early childbearing is high.



Reproductive health of girls

Climate-related crises can restrict access to already limited health-care services. Adolescent girls have higher health risks, particularly if they are married young. In such an environment, climate disasters may increase untreated reproductive and sexual issues, increasing maternal and newborn health risks including risk of early pregnancy and preterm birth.

Adolescent fertility and probability of death



Source: World Bank DataBank



Diseases linked to dust storms

Increasing intensity and frequency of dust storms put children and young people at higher risk of exposure to microparticles, acute respiratory tract infections and respiratory, cardiovascular and cardiopulmonary diseases. In addition, prenatal exposure to dust events significantly lowers birthweight, reduces gestational time, and increases infant mortality.⁸⁸

Air pollution

Air pollution is one of the leading threats to child health, accounting for almost a tenth of deaths in children under five globally. It affects lung function and neurodevelopment, and contributes to lower cognitive test scores.⁸⁹



Physical and mental health impacts

Extreme weather events leave children at risk of direct physical harm and injury. Such events, as well as the negative effects of climate change and lack of adaption capacity, can lead to mental health concerns, especially for young people who see their future prospects narrowing.

Nutrition and gender

Climate change impacts on food availability, cost and overall calorie consumption, as well as the quality of foods consumed. In a context where the fertility rate for adolescent girls is already the highest in the region, nutritional deprivations pose specific risks to their health and wellbeing, as well as that of their children.



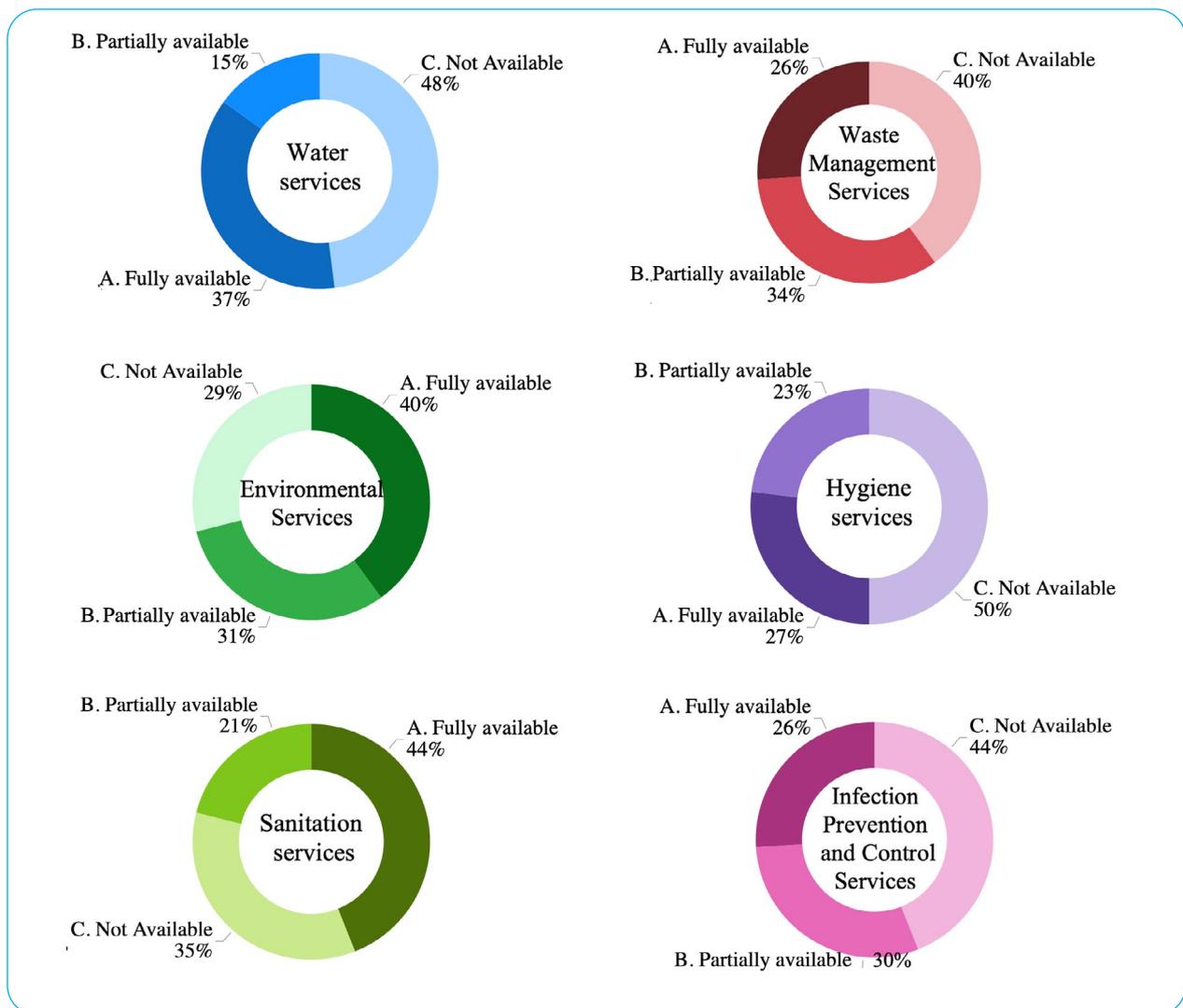
2.3 Education and learning

Education can be a proxy for wider vulnerabilities. Educated children and families are better equipped to adapt to climate change, prepare for disasters and to recover after they occur. Educated young people have better prospects in the workplace, and can diversify livelihoods.

Extreme weather events – from heat waves to floods – can interrupt children and young people’s education for extended periods. Disruptions in education services leave children at a life-long disadvantage. Children, especially girls, whose education is interrupted are less likely to return to school, and are more vulnerable to protection risks, child labour and child marriage. Children with disabilities are at particular risk of exclusion from education and thus from being empowered with the knowledge to reduce disaster risks.

In Iraq, 48 per cent of schools already lack access to basic water services. This disproportionately affects girls and children with disabilities, whose attendance is impacted by access to water in schools for hygiene and sanitation.⁹⁰

Availability of WASH and environmental services at schools in Iraq, 2022



Source: Joint Monitoring and Analysis, WHO, UNICEF, Ministries of Health

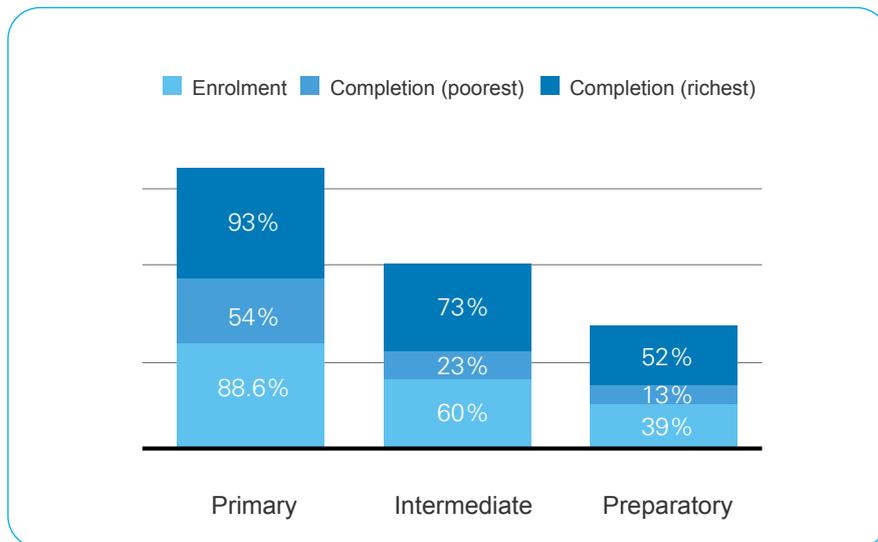


Girls' education

Adolescent girls and women shoulder significant household and caretaking responsibilities including securing food, water and fuel and caring for the sick and elderly. These factors, along with persisting discrimination, contribute to the gender gap in education.

As financial pressures rise due to the impact of climate change on livelihoods, poor families are motivated to remove girls from school to earn, perform domestic and caring duties, or to be married.

Enrolment and completion for girls across education levels



Source: Ministry of Education 2022

2.4 Social and child protection

A lack of social and child protection policies and programmes that protect against poverty and social exclusion, cushion against sudden shocks and protect children from violence, abuse and exploitation, make children and young people more vulnerable to climate change.

Nearly 1 in 2 children in Iraq live in multidimensional poverty, while 2 out of 5 Iraqi children face monetary poverty due to COVID-19.^{91,92}

The COVID-19 pandemic increased poverty and reduced families' ability to adapt. Families in poverty have less resilience to climate change impacts, experience food insecurity, and may resort to negative coping mechanisms such as child marriage.

Impoverished children and young people remain at a disadvantage later in life as they lack education and employment opportunities. They are trapped in generational cycles of deprivation with limited resilience and adaptive capacity, unable to be fully involved as active members of society. This is particularly acute for girls, as well as children and young people with disabilities, as discrimination, lack of access and occupational segregation further restrict their opportunities.

Families that are already displaced due to conflict or other reasons already have low resilience and may be more vulnerable to secondary displacement due to climate change hazards. They may also face challenges in accessing support or lack community networks to provide assistance in times of need. Settlement camps and internally displaced populations are more at risk from drought, and many are located in areas where water scarcity is a concern.

Livelihoods and food security

Agriculture in Iraq is vulnerable to increased temperatures, declining rainfall, changed quality and salinity of water, droughts and floods. These will limit agriculture productivity and require additional water resources, careful conservation and shifts in productive zones. Declining agricultural productivity affects livelihood opportunities and impacts on the availability and price of food, risking increased poverty and malnutrition. While before COVID-19, a daily wage could buy 31 kg of wheat flour, this has now dropped to 18 kg.⁹³

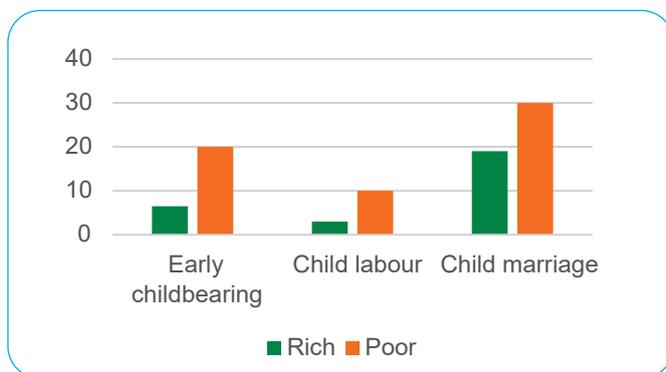
Water scarcity, food insecurity and economic strains due to climate change can lead to young people migrating and engaging in harmful coping mechanisms and risky behaviours.

Lost agricultural livelihoods due to water scarcity are already causing rural-urban migration. In 2022, over 5,000 families (34,000 people) were displaced by drought in southern Iraq and three-quarters relocated to urban areas. Cities struggle to cope with the sudden increase in population as fragile services are put under pressure and risks grow of conflict, insecurity, instability and disputes over resources.⁹⁴ Those who migrate may find themselves unable to access the services and livelihoods they need and be forced to migrate again.

Child labour

Climate change makes the vulnerable more vulnerable. As poor and marginalized families, like refugees and those in remote rural areas, see their livelihoods affected by climate change, they may adopt harmful coping mechanisms, such as taking children and young people out of school in order to work. About 7 per cent of children and adolescents aged 5–17 years are engaged in child labour.⁹⁵ The majority of these children work in the informal economy and are at greater risk of violence, exploitation and abuse.

Prevalence of selected child protection concerns in Iraq



Source: Iraq MICS, 2018

Protection and gender-based violence

When families face economic and financial shocks, women and girls are less able to access relief and are more vulnerable to trafficking and physical and sexual abuse. When infrastructure fails or informal settlements are set up due to disaster or displacement, girls must go out and earn, collect food, water and find shelter, making them vulnerable in a pressured environment.

Iraq already ranks 154th out of 156 countries on the Gender Inequality Index, and about 1.32 million people (75 per cent women and adolescent girls) are estimated to be at risk of forms of gender-based violence (GBV). About 77 per cent of GBV incidents are linked to domestic violence, which reportedly increased during COVID-19.^{96,97}

Around 200 grave violations against children were recorded in 2022.⁹⁸ An estimated 28 per cent of girls in Iraq are married before reaching 18 years of age.⁹⁹

The voice and agency of girls and women is frequently undermined across social groups and classes. As climate change takes hold, their innovations and strategies for survival are discounted and their decision-making role is undervalued.

4-year-old boy Saif and his 5-year-old friend Anwar are walking inside Al-Chibaish Marshlands in Thi-Qar, Iraq, on 14 February 2024.

Drought, water pollution, oil extraction, and dam construction have led to the drying up of marshes, forcing inhabitants to abandon their traditional way of life.

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3. Government and partner responses and priorities

3.1 Institutional arrangements

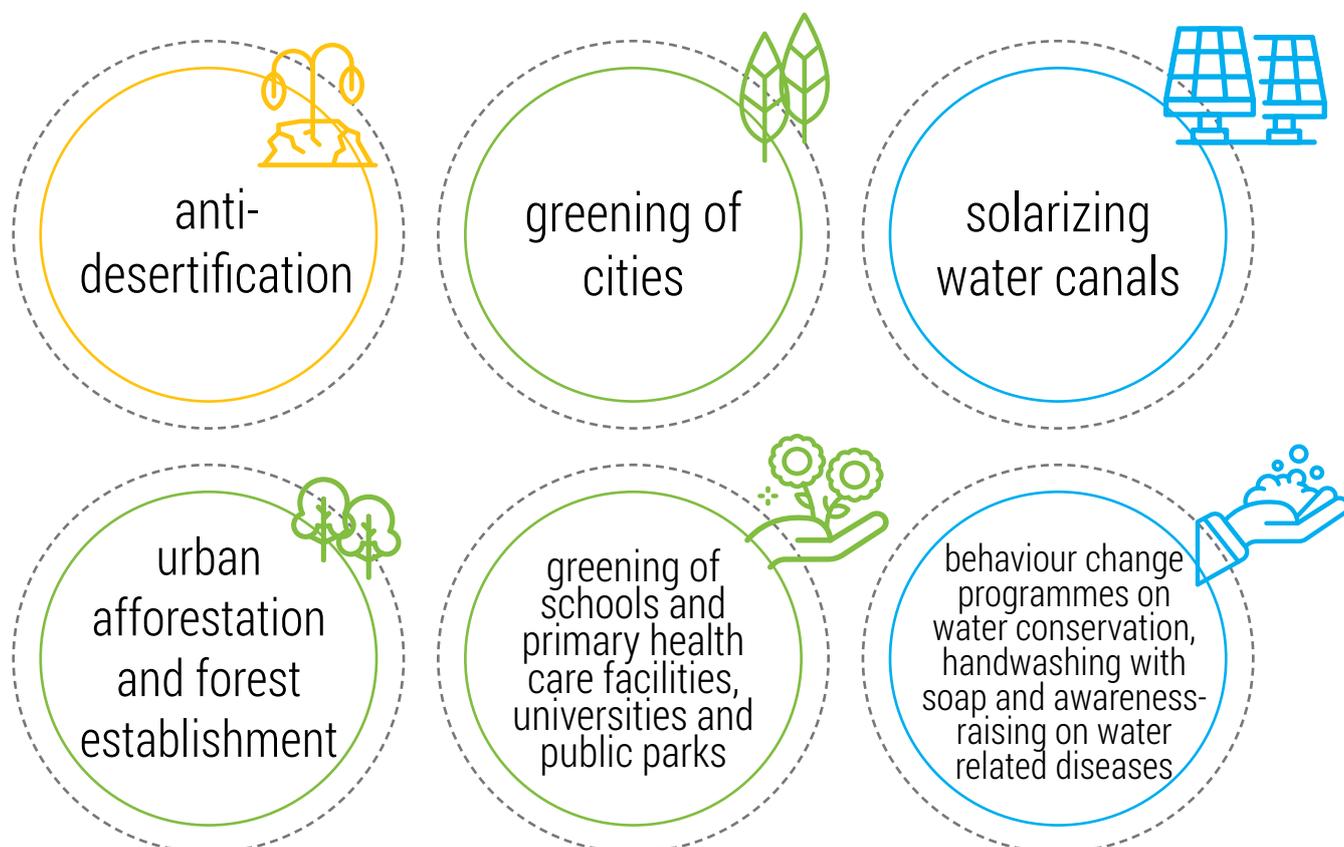
The governmental structure in Iraq is led by the Federal Government, with the Kurdistan Regional Government an essential counterpart for UNICEF.

Since ratifying the Paris Agreement in 2021, the Iraqi government has accelerated the development of adaptation and mitigation strategies, with a key motivation being access to climate finance from the Green Climate Fund.

The Ministry of Environment has been in place since 2015 as the national focal point for climate change and the environment. Iraq has also established a Climate Change Directorate and appointed a special advisor on climate change to the prime minister.

The Ministry of Environment has established seven committees to address climate change, with members from the Ministries of Municipal Works, Water Resources, Education, Higher Education, Health, Planning and Agriculture, the Mayor of Baghdad, and the Ministry of Municipalities and Tourism in KRI. The committees focus on priority areas and work on legislative review, securing financial resources and monitoring and evaluation.

Focus areas of climate change committees under the Ministry of Environment



3.2 Government

Federal ministry	Observations on CEE involvement
Ministry of Environment	Overall jurisdiction over management of natural resources and environment, with input from key ministries as detailed below.
Ministry of Water Resources	Manages water resources, i.e. reservoirs, aquifers and trans-boundary water and tariffs.
Ministry of Agriculture	Responsibility for irrigation at national level.
Ministry of Education	Collaborates with the Ministry of Environment on planting trees in schools, strengthening teachers' and students' awareness on the impact of climate change and reviewing the curriculum to include concepts on climate change.
Ministry of Constriction, Housing and Public Municipalities	Responsible for provision of municipal services including water supply, sanitation, removal and disposal of sullage, garbage, sewage and storm water, solid and liquid waste, drainage and maintenance. Master planning and enforcement of laws and rules are in its area of responsibility.
Ministry of Health	Collaborates with the Ministry of Environment on solarizing health facilities and cold chain, sustainable waste management and other green initiatives.
Ministry of Labour and Social Affairs	Addresses multi-deprivations of children, young people and households that may amplified by exposure to climate risks.

3.3 United Nations agencies in Iraq

United Nations agencies plan and implement their programmes under the United Nations Sustainable Development Cooperation Framework. A working group on climate change mitigation and adaptation and disaster risk reduction has been established to focus on both policy and community engagement.

United Nations agency	Observations on CEE involvement
Food and Agriculture Organization (FAO)*	<ul style="list-style-type: none"> Acknowledges the impact of climate change on food security.
International Labour Organization (ILO)	<ul style="list-style-type: none"> Increasingly concerned about working conditions in Iraq due to heat waves. In 2022, they called for action to protect workers and to reduce risks for those working in extreme heat.
International Organization for Migration (IOM)*	<ul style="list-style-type: none"> Participated in response to climate-induced migration. In 2021, IOM and Social Inquiry surveyed 802 locals and migrants in Basra to identify critical issues hindering their ability to integrate into fragile urban settings.
International Trade Centre (ITC)	<ul style="list-style-type: none"> Project to Strengthen the Agriculture and Agrifood Value Chain and Improving Trade Policy in Iraq (SAAVI), which recognizes the impact of climate change on agricultural productivity.
UN Human Rights Office (OHCHR)	<ul style="list-style-type: none"> Recognizes climate change impacts on human rights, including the rights of persons with disabilities.
UNWomen	<ul style="list-style-type: none"> Will respond to climate change and work towards gender mainstreaming at national level through joint programmes, initiatives, advocacy and coordination. Technical partnership with WFP on gender equality and women empowerment initiatives.
United Nations Children's Fund (UNICEF)*	<ul style="list-style-type: none"> Discussed in detail in subsequent chapters.
United Nations Development Programme (UNDP)*	<ul style="list-style-type: none"> Contributes to Iraq's environmental rehabilitation and development efforts by addressing the root causes, risks and mitigation measures associated with environmental degradation, climate change, and disaster shocks through capacity building and technical assistance. Significant projects on climate change and the environment include the Mosul Dam Emergency Preparedness Plan, the introduction of solar photovoltaic energy, NAP development and NDC development.

United Nations agency	Observations on CEE involvement
United Nations Economic and Social Commission for West Asia (UNESCWA)	<ul style="list-style-type: none"> • Has a dedicated Climate Change and Natural Resource Sustainability Cluster working to advance climate action and integrated management of natural resources, specifically focusing on water, energy and food security in the Arab region. • Supported RICARR studies on the impacts of climate change on the Euphrates basin and food security analyses.
United Nations Educational, Scientific and Cultural Organization (UNESCO)*	<ul style="list-style-type: none"> • Mainly engaged in heritage sites and climate change impacts on these. Wetlands in southern Iraq are a major focus.
United Nations Environment Programme (UNEP)*	<ul style="list-style-type: none"> • Started operations in Iraq in 2003 with a project to determine the environmental impact of conflict. • Since 2020 has engaged in a joint agreement with UNDP to accelerate Iraq's implementation of the 2030 Sustainable Development Agenda focusing on environmental policy, biodiversity and ecosystems, pollution and climate change for the advancement of environmental sustainability.
United Nations Human Settlements Programme (UN-HABITAT)*	<ul style="list-style-type: none"> • Priority areas include climate change, solid waste management, WASH, resilience and risk reduction, urban energy and other key topics related to climate change, environment and energy.
United Nations Office for Project Services (UNOPS)	<ul style="list-style-type: none"> • With €35 million in funding from the Government of Germany's development bank, KfW, is working to rehabilitate housing and other public infrastructure damaged by conflict and build resilience in Anbar governorate and Sinjar district in Ninewa governorate. Though not explicitly a climate change initiative, this considers resilience to climate change impacts.
World Food Programme (WFP)*	<ul style="list-style-type: none"> • Collaborated with the German Federal Ministry of Economic Cooperation and Development to support 104,500 people from vulnerable communities to rebuild livelihoods after conflict and adapt to climate change, alongside advancing the digitalization of the Public Distribution System for food rations.
World Health Organization WHO*	<ul style="list-style-type: none"> • Published the health and climate change country profile in 2021.

3.4 International financial institutions

International finance institution	Observations on CEE involvement
World Bank	<ul style="list-style-type: none"> • Three major projects related to the environment, totalling US\$1.4 billion. • The Emergency Operation for Development Project (US\$ 750 million) restores basic services in recaptured areas, including municipal services such as water, sewerage, roads, electricity and other facilities.
Islamic Development Bank	<ul style="list-style-type: none"> • Allocated US\$17 million for the Reconstruction of the Hawija Technical Institute Project to support rebuilding in areas affected by conflict.

3.5 Multilateral climate funds

Although UNICEF itself is not accredited, it can apply for the Green Climate Fund's (GCF) Readiness Fund through National Designated Authorities and can also partner with other accredited partners.

GCF funds projects that increase climate resilience and promote low-emissions development and sustainable solutions. Its impact areas are: enhanced livelihoods; improved health, food and water security; resilient infrastructure; resilient ecosystems; sustainable energy; transport; energy-efficient infrastructure; land use and forest management.

In 2018, GCF funded UNDP and the Government of Iraq to establish a framework and build capacity within the Ministry of Environment to act as the National Designated Authority for Sustainable Development Goal (SDG) 13.¹⁰⁰

3.6 Development partners

Development partner	Observations
Australia (Department of Foreign Affairs and Trade)	<ul style="list-style-type: none"> Australia is committed to supporting ambitious and practical action on climate change, with climate-related support organized around three pillars: international cooperation, strengthened trade and investment, and support in its region. Since 2014, Australia has committed over A\$207 million in humanitarian and stabilization assistance to Iraq. In recent years, Australia has supported WASH provision by UNICEF Iraq for children in southern governorates of Iraq (over US\$5.8 million).
Canada	<ul style="list-style-type: none"> Canada has shown interest in climate change programming, particularly with a gender lens. It has committed over US\$4 billion over six years (2016–2022) toward security, stabilization, and humanitarian and development assistance, with a significant portion focused on Iraq. Canada has committed over US\$483 million in non-military assistance for Iraq and increased its diplomatic presence, including through the appointment in 2018 of Canada's first resident ambassador since 1991.
Denmark	<ul style="list-style-type: none"> Denmark's strategy for development cooperation (2021–2025) sets out two priority areas: to support people in poverty, insecurity and fragility, and to lead on climate change action. Both are relevant to the Iraq context. Denmark contributed to support for education and child protection in 2020. The Danish-Arab Partnership Programme (2022–2027) is the primary framework for cooperation in the region, and includes focuses on youth, gender equality and stabilization.
European Union/ ECHO	<ul style="list-style-type: none"> The European Union focuses on preserving security and stability, diversifying the economy and creating jobs, and rebuilding the social contract between citizens and institutions. In its Multi-annual Indicative Programme for Iraq (2021–2027) the European Union's engagement on policies for climate change adaptation/mitigation supports Iraq's capacity in innovation, circular economy and green business development and investment. Support for the Basra water project includes a component on green job creation.
German Federal Ministry for Economic Cooperation and Development (BMZ), KfW development bank	<ul style="list-style-type: none"> The current BMZ portfolio volume for financial cooperation is about €850 million. On behalf of the BMZ, KfW funds a bilateral project, in cooperation with Ministry of Construction, Housing, and Public Municipalities, Ministry of Public Works and Muthanna governorate, focusing on water supply and reduction of water loss. On behalf of the BMZ, KfW also funds projects with climate components implemented by NRC, UNOPS, UNICEF and IOM. On behalf of the Federal Foreign Office, KfW provides the Iraqi government an untied financial loan of up to €500 million, e.g. financing the rehabilitation of water and electricity supply infrastructure.
Japan	<ul style="list-style-type: none"> Japan's support focuses on the promotion and diversification of industry for economic growth, strengthening basic economic infrastructure and building a foundation for livelihoods.
Netherlands	<ul style="list-style-type: none"> The three financial priorities of the Netherlands are agriculture, water and youth entrepreneurship, and they have also shown interest in supporting climate change.
Sweden	<ul style="list-style-type: none"> Sweden's strategy for development cooperation with Iraq (2022–2026) includes as a strategic objective environment, climate and sustainable development, including support for resilience, adaptation and green transition.
United Kingdom	<ul style="list-style-type: none"> As chair of COP26 in 2021, the United Kingdom has identified climate change and global health as one of the four priorities in its Strategy for International Development (May 2022). In 2022–2023, the United Kingdom approved a budget of £15.3 million for Iraq, of which £9 million was through the Foreign, Commonwealth and Development Office. The United Kingdom jointly funds, with Canada, the Catalytic Climate Action in Iraq project designed to strengthen capacity for mitigation and adaptation.
USAID, BPRM and BHA	<ul style="list-style-type: none"> USAID has been present in Iraq since 2003. Climate change features in its portfolio, particularly under water scarcity. USAID is not currently funding UNICEF programming. The Government of Iraq, USAID and DAI worked from 2003 to 2005 to re-establish the southern marshlands by re-flooding the area.¹⁰¹ The waste management sector is working with USAID to reduce emissions by capturing methane from landfills.¹⁰²

3.7 Academia

The Southern Iraqi Universities' Initiative of the Ministry of Higher Education and Scientific Research and the International Research and Exchanges Board (a global education and development NGO) is engaging in climate research with a US\$1 million grant from the United States received in May 2022.

The University of Technology hosted a climate change conference on water scarcity, sanitation and urban planning in June 2022. Academics and young people presented their research and showcased ideas such as composting and green buildings. A panel discussion provided a platform from which young people could stress the need for change, however there were few outcomes from the event.



A cohort of young individuals are participating in a training program focused on the installation of solar energy systems in the city of Baghdad, Iraq.

4. Child-inclusive CEE policies, strategies and programming

4.1 CEE priorities and strategies

CEE priorities and strategies	Observations
Nationally Determined Contributions (NDCs) ¹⁰³	<ul style="list-style-type: none"> • Finalized in December 2021 with UNDP support. • Pledge to voluntarily cut 1–2 per cent of greenhouse gas emissions by 2030, and further reductions of 13 per cent provided international technical and financial support and national political and security stability. Focus on oil, gas, electricity and transportation, which collectively account for 75 per cent of Iraq’s greenhouse gas emissions. • Do not include references to marginalized and disadvantaged children or youth; meaningful references to human or child rights; and children and young people are not identified as essential agents of change. The process of developing the NDCs was not participatory and did not reference the inclusion of children and young people. • Do not include water management.
Green paper on climate change	<ul style="list-style-type: none"> • Under development by government, with support from UNEP and UNDP, and limited involvement by UNICEF. • Outlines measures to mitigate climate change impacts and support the net-zero transition.
Climate change risk assessment	<ul style="list-style-type: none"> • Evaluation of levels of exposure and vulnerability in Iraq underway by dedicated climate change technical team at the Ministry of Environment.
National Environmental Strategy and Action Plan (2013–2017) ¹⁰⁴	<ul style="list-style-type: none"> • Identifies the following priorities: protecting and improving the quality of water, soil and air; preserving biodiversity and marine and coastal environment; minimizing waste and oil, radioactive and chemical pollution; and developing institutional and legislative frameworks. • Five-year implementation plan includes programmes to protect and enhance the environment.
The Future We Want: 2030 Vision ¹⁰⁵	<ul style="list-style-type: none"> • Envisages, among other things, a diversified economy and sustainable environment. • Proposes a new social contract to enhance trust in government and provide opportunities for self-development and income. • Acknowledges Iraq’s contributions to greenhouse gas emissions but also how Iraq can stimulate oil and gas production to increase income.
National Adaptation Plan (NAP)	<ul style="list-style-type: none"> • Three-year plan began development in 2020 by the Government of Iraq and UNEP, funded by GCF.¹⁰⁶ • Looks at impacts of climate change and the challenges and vulnerabilities Iraq faces.
Mesopotamia Revitalization Project ¹⁰⁷	<ul style="list-style-type: none"> • Re-introduced by the then-president at COP26 in 2021. • Includes environmental strategy (including modernizing water administration, generating clean energy and encouraging investment), and brings in the private sector and youth to help tackle climate change effects. • While cabinet adopted this policy framework under the former president, political will is required to fund and operationalize long-term initiatives.
White paper on economic reform (2020)	<ul style="list-style-type: none"> • Seeks to place the Iraqi economy on a more sustainable footing, freeing up public funds for investment in climate change response.

CEE priorities and strategies	Observations
National Biodiversity Strategy and Action Plan (2015–2020) ¹⁰⁸	<ul style="list-style-type: none"> Guiding framework for efforts to achieve healthy and resilient biodiversity and to provide a basis for living sustainably.
Land Degradation Neutrality Target Setting Programme ¹⁰⁹	<ul style="list-style-type: none"> Iraq is a member of this programme established by the UNCCD Global Mechanism. Scientific working team established by Ministry of Agriculture, with specialists from different ministries to identify degraded areas, monitor progress towards SDG 15.3 (land productivity, land cover and soil organic carbon), and develop nationally relevant complementary indicators on soil salinity, erosion and dust storms.
Iraq Water Law ¹¹⁰	<ul style="list-style-type: none"> Introduced in 2015 to reform water usage but is still under negotiation prior to passage in parliament. Seeks to address Iraq's exceptionally low water tariffs, estimated at US\$0.006–0.01/m³ (IB-NET) – far lower than regional (US\$0.75/m³) and global (US\$2.04/m³) rates and contributing to a daily per capita consumption of as much as 392 litres in some areas.^{111,112} An agricultural regulation to reduce land available for wheat and barley cultivation by 50 per cent was introduced by the Ministries of Agriculture and Water Resources in 2021, to address severe water shortages. However, this is a temporary solution in the absence of a water policy and food security remains unstable with rising temperatures and declining precipitation.¹¹³
Law 50 (2008), Ministry of Water Resources	<ul style="list-style-type: none"> One of several frameworks in force in the absence of a water law. Establishes a framework for institutionalizing water resource management. Does not reference climate change.

4.2 Do CEE policies and strategies address children and young people's needs?

National climate policies, strategies, and reports that guide the CEE agenda in Iraq are not child-sensitive, and sometimes lack any reference at all to children or how climate change affects them.

National CEE policy/ strategy	Child focus	Observations
National Environmental Strategy and Action Plan for Iraq	No	<ul style="list-style-type: none"> A few mentions of children and young people. Mentions relate to children learning about climate change, child empowerment and children's vulnerability to water-borne diseases.
Iraq Vision 2030	No	<ul style="list-style-type: none"> No references to children.
Integrated National Energy Strategy	No	<ul style="list-style-type: none"> No references to children. Focuses on maximizing oil export and revenues while developing the gas and power sectors and value-adding industries.
Green paper on climate change (under development)	No	<ul style="list-style-type: none"> UNDP and UNEP are working with the government. UNICEF is not involved in the development process.
National Biodiversity Strategy and Action Plan (2015–2020)	No	<ul style="list-style-type: none"> No references to children and young people.
National Adaptation Plan	Under development	<ul style="list-style-type: none"> Ongoing development process is supported by UNEP with funds from GCF. Prioritizes addressing climate change impacts on poor and vulnerable communities. Opportunity for UNICEF to advocate for focus on children and young people.

4.3 Do social sector strategies incorporate CEE?

While some sectoral strategies acknowledge CEE concerns, many do not.

National sectoral strategy/policy	CEE focus	Observations
National Health Policy 2014–2023	No	<ul style="list-style-type: none"> • A new policy is under development.
Comprehensive Multiyear Immunization Strategy and Plan	Yes	<ul style="list-style-type: none"> • Contains references to sustainable energy provision.
National Nutrition Strategy 2012–2021	No	<ul style="list-style-type: none"> • Developed in 2012 and reviewed in 2017 and 2019. • Covers all regular and emergency nutrition programmes and interventions. • Does not reference potential risks to nutrition from climate change.
National Youth Vision 2030	Yes	<ul style="list-style-type: none"> • One of its five priorities is on sustainable environment, with objectives relating to pollution, emissions, water conservation, environmental protection, biodiversity protection and developing sustainable consumption behaviours.
Law No 50 of the Ministry of Water Resources (2008)	No	<ul style="list-style-type: none"> • No national water law is currently in force. This is one of several frameworks for water governance and establishes a framework for institutionalizing water resource management. Does not reference climate change.
National Education Strategy 2012–2021	No	<ul style="list-style-type: none"> • Adopted in 2012 and reviewed in 2019. • Includes regular education programmes with minimal reference to conducive learning environment in relation to school buildings. • No mention of climate change and its impact on children.
National Education and Higher Education Strategy for Iraq	Yes	<ul style="list-style-type: none"> • The 2012–2022 strategy did not include climate change. • However, the Government of Iraq’s National Statement of Commitment at the Transforming Education Summit (2022) in line with the new strategy for 2022–2031 includes a commitment to enhance knowledge, skills and public awareness of climate change risks, reduce its impacts through education, and improve education infrastructure to ensure safety and appropriateness for climate change.¹¹⁴
National Social Protection Strategy	Yes	<ul style="list-style-type: none"> • The strategy is currently under development. • Specifically mentions children and adolescents. • Includes shock responsiveness as a core approach to handling critical challenges including climatic and economic instability.
Water and Sanitation Master Plan	Yes	<ul style="list-style-type: none"> • Master plan is under development to maintain and improve water supply, wastewater management and water reuse, with UNICEF technical support. • Aims to define a system-wide integrated water supply, wastewater, and reuse capital improvement strategy. • Will be a roadmap consisting of a series of programmes for utilities to undertake in the short (0–5 years), medium (6–15 years) and long (16–25 years) term.
Iraq’s Women Economic Empowerment Plan	No	<ul style="list-style-type: none"> • Key pillars include building capacity for gender-responsive budgeting, developing women’s skills in the digital and agriculture sectors; boosting access to finance for women; increasing data related to women in the private and informal sectors. implementing legislative reforms to reduce gender gaps; and strengthening knowledge and capacity around access to childcare.
National Strategy for Iraqi Women 2023–2030	Yes	<ul style="list-style-type: none"> • Special focus on the importance of women’s political participation, protection of women and girls, economic empowerment, and climate change. • The national strategy is in line with UN Security Council Resolution 1325, constitutional principles of human rights, and the Government of Iraq’s priority to empower women.



Deralok hydraulic dam in Amedi district in Dohuk, Iraq.

5. UNICEF country programme and linkages to CEE

The UNICEF Strategy for Climate, Environment, Energy and Disaster Risk Management, (2022–2030) identifies six priorities and areas of comparative advantage supported at regional and global levels.

Delivering at scale in and across UNICEF goal areas



Source: UNICEF Strategic Framework for Climate, Environment, Energy and Disaster Risk Reduction 2022–2030

In Iraq, climate change has the potential to adversely impact the survival, development and well-being of children and young people and to exacerbate inequalities such that vulnerable populations bear the brunt of the challenges it poses.¹¹⁵

Under its Country Programme in Iraq (2020–2024) and its mid-term revisions, all UNICEF programmes in Iraq aim to reduce key vulnerabilities of children including to climate change. All programmes are, directly or indirectly, affected by climate, energy and environment, and have a part to play in building climate change resilience. UNICEF contributions* to reducing children’s vulnerabilities and building their resilience to climate change risks in Iraq are discussed below through the lens of three approaches:

PROTECT children and young people, EMPOWER them to demand and engage in climate change action, and ENACT ambitious commitments to sustainability (see also chapter 6).

*<https://www.unicef.org/iraq/reports/annual-report-2022>

5.1 Office coordination on climate change

UNICEF Iraq has established a climate change task force convened by the Deputy Representative. This coordinates among programmes, partners, government and donors to establish evidence-based baselines and milestones, collects and distributes thematic information, and coordinates the advocacy strategy. Using the findings from this landscape analysis, the task force will prioritize challenges, support cross-sectoral work, identify indicators and outcomes, and set the climate change vision and strategy for the Country Office and Field Offices.

5.2 Protect: water, sanitation and hygiene

Key approaches in UNICEF WASH programming

System strengthening

- Formation of a government-led WASH sector coordination groups
- New modalities for water management
- Water safety planning and digital solutions
- Smart city initiative for enhanced sector control over water losses

Service delivery

- Climate-resilient technology to harvest rainwater and recharge aquifers
- Environmentally friendly wastewater treatment for use in irrigation
- Local chlorine generation units
- Green energy for water systems in schools, health-care facilities and refugee camps
- Sustainable, durable and cost-effective WASH service in humanitarian contexts

Behaviour change

- Engagement of young people as change agents
- Private sector engagement for enhanced water management

UNICEF in Iraq focuses on providing clean and safe water and sanitation to vulnerable populations, bridging between humanitarian support for populations affected by conflict to building resilience against water scarcity, especially in the south. **Climate-resilient WASH systems and services** have been piloted in partnership with local governments and water authorities to address water scarcity.

UNICEF engages partners for WASH sector reforms and innovations for improved governance, financing and accountability. This has included the development of a WASH Bottleneck Analysis Tool and supporting 13 out of 15 governorates to conduct the analysis. UNICEF is leveraging the opportunity opened by the end of the cluster system in 2022 to advocate with the federal government to take the lead in the sector.

By working with schools, healthcare centres and communities, UNICEF builds knowledge among children and families on the appropriate use of water and improved hygiene practices.

Sustainable water supply in Duhok

Amedi, a district inhabited by refugees, IDPs and host communities in Duhok governorate in the Kurdistan Region of Iraq, experiences severe water scarcity due to climate change, drought and a water table that has fallen from 5 metres to 10 metres.

While there were plans to construct a water treatment plant on the Zab River, the turbidity of the water, the economic crisis of 2014, and the war with the Islamic State created major setbacks. In 2022, as part of its humanitarian support for Syrian refugees, UNICEF partnered with the Dohuk Directorate of Outskirts Water, a government counterpart, to support the extension of water supply by constructing a main water pipeline and treatment facility from the Deralok hydraulic dam.

The new pipeline extension, with a capacity of 2,400 m³ per hour, ensures sufficient treated drinking water for over 150,000 refugees, IDPs and host communities (76,500 girls and women; 69,000 children), and WASH facilities for 70 schools and 18 primary health facilities.

To ensure the project's sustainability, local technical staff in the Directorate of Duhok Water Outskirts will manage and operationalize the project. They will also ensure continued maintenance and upkeep through coordination mechanisms established under the nexus principle of transitioning from humanitarian to development support.



Children from Hassasham camp for internally displaced persons in Iraq are enjoying access to water.

© UNICEF/Anmar

5.3 Protect: health and nutrition

Under its Country Programme, UNICEF Iraq is reforming the expanded programme on immunization; supporting maternal, newborn, child and adolescent health; providing nutrition support and capacity development; strengthening health systems and health and nutrition in emergencies. By achieving outcomes in these key areas, UNICEF aims to reduce key vulnerabilities of children, adolescents and young people, even the most marginalized, and to **make health systems resilient and climate-smart**, as well as inclusive and gender responsive.

Health facility solar electrification aims to provide equitable access to reliable and sustainable electricity to primary health care facilities to deliver essential health services. Solarization of health facilities also strengthens climate-resilient health infrastructure by reducing the dependency on the electricity grid network.

The Ministry of Health and the UNICEF Immunization Technology Centre are undertaking an assessment and capacity-building exercise to solarize the cold chain, essential health services and health facilities. The infrastructure and energy needs of health facilities are being assessed, in order to prepare an investment case for the solarization of 400 health facilities. The Immunization Technology Centre will provide long-term agreements (LTAs) for Iraq to access support for solarization project commissioning, capacity building and after-sales maintenance.

There remains substantial potential to enhance the focus of the Ministry of Health on climate-change-induced health risks. Iraq's health system suffers from chronic under-investment, ageing infrastructure, underuse of information technology and weak budget and financial capacity. The Directorate of Public Health intends to establish a climate change unit to coordinate efforts and monitor climate change impacts on public health.

5.4 Protect: education

UNICEF supports Iraq to strengthen education systems through education sector coordination and planning, supports access to learning including through Back to Learning social and behaviour change campaigns, and enhanced quality of learning through school-based management and strengthened pedagogy. These outcomes support **resilient and sustainable education systems** that are inclusive and gender responsive in the transition towards government-led education coordination.

School-based management promotes decentralization and power-sharing between head teachers, teachers, parents, and community members, allowing stakeholders to participate in day-to-day decisions, improve school governance and implement gender-responsive School Improvement Plans utilizing school block grants from UNICEF.

UNICEF collaborates with the Ministry of Education to make school environments conducive to meaningful quality learning by supporting the development of learning frameworks and materials, and contextualizes Life Skills and Citizenship Education to equip young people with skills for earning and civic engagement.

UNICEF and UNESCO are supporting the Ministry of Education to develop gender-responsive national and governorate five-year teacher training and development plans to improve the quality of teaching. UNICEF also supports training in participatory teaching-learning, subject matter training and regular classroom-based mentoring by supervisors and school principals.

A gap remains in that there is little reference to climate change in the federal curriculum, although in KRI the curriculum does include climate change topics. A curriculum mapping exercise planned by the Ministry of Education will provide entry points for climate change integration. The ministry is also planning to establish a climate change committee to add climate change to extracurricular activities.

There is an opportunity to integrate inclusive, child-centred and gender-responsive disaster risk reduction and climate change, particularly focusing on earthquake risks in the north and drought in the south, including in school design, site selection and construction.

5.5 Protect: child protection

UNICEF Iraq's child protection efforts aim to improve legal, policy, and institutional frameworks for child protection, increasing gender-sensitive child protection services and changing attitudes and practices around violence against children and women, and focusing on **identifying and protecting the most vulnerable children and young people**.

Climate change has led to increased migration in Iraq, exacerbating protection concerns particularly around gender-based violence, child labour, family separation and child marriage, as well as increased harassment, exploitation and abuse. The combined impact of climate change-induced deprivations (in terms of water, food, work and services) and weak government in many parts of the country, has made children and young people in certain rural communities more vulnerable to recruitment by armed groups. Children's psychosocial support is thus vital in climate change programming.

5.6 Empower: social policy

UNICEF aims to ensure that **shock-responsive social-protection systems** that are inclusive and gender responsive are in place that create and support a safe environment for children, which in turn requires institutions with the mandate to plan and budget appropriately for children. UNICEF is drawing on its technical expertise and multi-sectoral partnerships in the areas of child poverty, social protection, public financial management for children and promoting local governance to leverage opportunities to integrate climate change into social protection programming.

UNICEF is working to integrate climate change in the country's social protection strategy (and is supporting its development) and ensuring it is shock responsive and identifies approaches to supporting long-term household-level adaptation strategies through livelihood opportunities. Recognizing the paucity of data, UNICEF aims to strengthen government capacity to generate evidence on climate change impacts on children and ensuring these underpin social protection programming and financial commitments.

A key focus is to advocate for the realignment of national plans and budgets by incorporating the concerns of vulnerable people and their livelihoods to mitigate the impact of climate change, and for targeted food distribution and fortification through existing post-distribution monitoring systems.

5.7 Empower: adolescent development and participation

UNICEF aims to ensure all young people live in resilient communities to which they contribute and benefit from a protective, stimulating and supportive environment that allows them to realize their full potential throughout their lives. Youth engagement is supported through integrated cross-sectoral approaches on issues like climate change, child marriage, GBV, hygiene, health and education. UNICEF has empowered young people in Iraq to take action on climate change adaptation and mitigation while raising awareness on water scarcity challenges.

UNICEF aims to reach young people and supports their innovative solutions through the Youth Challenge on Climate Change and Youth Climate Action Networks, and by integrating climate change education into skills-building programmes and through youth-led advocacy campaigns on water scarcity.

Utilizing platforms for digital engagement such as U-Report, Internet of Good Things and Talkwalker, and through social media campaigns, UNICEF raises awareness about climate change threats and encourages young people to participate in climate action. On World Children's Day 2022, Mujtaba Alshawi became the first Youth Advocate named by UNICEF Iraq on climate change.

Using the participatory action research model, UNICEF involves young people at all stages of research, leading to tailored and community-led solutions that promote meaningful youth participation and sustainable development. This empowers young people to be climate and environmental champions and to explore issues affecting the wider community, such as water scarcity in Basra. Through this initiative, young people delve into the root causes of key issues impacting on their communities, and become part of the solution by leading data collection, reflecting on their findings and designing plans for positive change.

In collaboration with the Ministry of Youth and Sport, UNICEF is supporting development programmes to improve young people's participation and inclusion in the job market, civic engagement and to build the capacities of government and NGO partners in delivering services for young people.

5.8 Empower: social behaviour change and community engagement

With the success of human-centric social and behaviour change approaches to building capacity, resilience and demanding change demonstrated in education, health and COVID-19 response, UNICEF is developing a comprehensive social and behaviour strategy on climate change to facilitate longer-term social change.

The strategy will focus on identifying and addressing enablers and barriers to adopting CEE practices that are sustainable in the long term. It will engage community stakeholders, religious leaders and young people among other population segments through gender-transformative programming.

The strategy will take a holistic approach to generating demand for climate-safe practices and implementing them at the household level. It will be led by communities to galvanize local action by engaging specific places and groups of people on what climate change means for them.

5.9 Empower: advocacy and communication

Climate change is a focus of UNICEF advocacy which includes extensive public information campaigns, using digital platforms to engage youth, bringing their voices to the fore in advocacy, and conducting meetings and seminars to involve them in discussions around climate and climate justice at national and global levels.

Key advocacy priorities in Iraq include the development and implementation of a new nation-wide water management policy, an inclusive child- and youth-sensitive adaptation plan and advocacy strategy focusing on basic services and meeting Iraq's international obligations, and sensitizing the Iraqi public to the urgency of climate action and calling for its national prioritization.

5.10 Enact: green contracting

In April 2022, environmental sustainability officially became a UNICEF core value.

Sustainability is a top-line priority for both programmes and supply in the organization's Strategic Plan (2022–2025).¹¹⁶ As a global organization, UNICEF has publicly pledged to achieve net zero emissions before 2050, an aspiration which, in Iraq, is supported by the climate change task force.

In line with the United Nations Sustainability Management Strategy (2021),¹¹⁷ UNICEF applies green safeguarding principles to contracting and aims to reduce carbon footprints. Environmental and social standards are also applicable to all partners, vendors and suppliers.

In its Strategic Plan, UNICEF commits to WASH services and supplies that focus on climate change adaptation and mitigation, environmental sustainability and disaster risk reduction.

UNICEF has committed to ensuring all construction achieves eco-efficiency towards carbon neutrality and provides accessible access to UNICEF premises to support inclusion of children and adults with disabilities.

Youth advocates for climate action

UNICEF's Young People's Advisory Group (YPAG) is a key platform for youth advocacy and capturing and amplifying youth voices. It comprises 24 young people who act as advocates on key UNICEF priorities, including climate change, gender, ECD and digitization. YPAG members have contributed to the development of this CLAC and participated in UNICEF programme reviews.

When consulted on climate change, the YPAG expressed concern about industrialization and rapid urbanization without proper legislation or accountability. Many youth spoke about their wanting to contribute but being unsure how they could make a change. They were concerned about the lack of a national strategic approach to climate change, and argued that government should take the lead at the national level and that this should trickle down to sub-national levels. They argued for specific measures that would impact on their lives, such as more regulation, a push for solarization and an increase in green spaces.

These concerns were conveyed by Mujtaba Alshawi, the Youth Advocate for Climate Change when he met with the United Nations climate change advisor and other key officials at the United Nations General Assembly.



On 16 September 2022, UNICEF Goodwill Ambassador Vanessa Nakate (front, second from right), Ugandan youth climate activist Davis Reuben Sekamwa (walking behind, second from right), and UNICEF Youth Advocates visit United Nations Headquarters in New York to meet with Selwin Hart, Special Adviser to the UN Secretary-General on Climate Change and Just Transition.



Young girl engaged in training on how to install solar energy systems in Baghdad, Iraq.

6. Recommendations

To reduce children’s vulnerabilities, build their resilience against climate change risks, and work towards a liveable planet for all Iraq’s girls and boys, UNICEF provides guidance to governments, the United Nations family, civil society and enables children and young people to act as agents of change.

Gender-responsive and inclusive climate policy development, delivery and reporting at the national level will require special focus on children and young people, with disabilities especially girls, as they are more likely to face social and economic risk factors, such as poverty and unemployment, that place them at greater risk.

6.1 Principles for the future

Protect every child and young person, their health, safety, learning and opportunities. The critical social services they rely on – WASH, health, education, nutrition, social protection and child protection – must be adapted and made resilient to the growing impacts of climate change to reduce vulnerability now and in the future.

Prepare every child and young person to live in a climate-changed world; build their adaptive capacity, make their voices heard and acted on, and enhance their education and skills so they can participate in creating a sustainable future.

Prioritize every child and young person ensuring urgent and sufficient funding, resources and commitment are deployed to protect and prepare them for climate change.

Empower young people, especially girls and marginalized children and engage young people for equitable climate change action following principles of gender-transformative programming, and support equal participation by girls and children with disabilities in climate change action to empower them and build their resilience as they transition to adulthood.

To implement these principles for a liveable planet for Iraq’s children, UNICEF recommends action towards three broad objectives: to PROTECT and EMPOWER children, and to ENACT ambitious commitments to sustainability.

Protect

the resilience of children and their communities by adapting essential social services to a changing climate, disasters, and a degrading environment.

Empower

every child with the education, skills, and opportunities to be a champion for the planet and be a voice for their rights.

Enact

ambitious sustainability and emissions reduction commitments within UNICEF and support our global network of partners, governments and suppliers to do the same.

Source: UNICEF Action Plan on Sustainability and Climate Change

6.2 Recommendations to reduce children's vulnerabilities and build resilience

PROTECT

Plan, design, innovate and implement efforts to address water scarcity including, but not exclusive to, water use/reuse and rain catchment.

Recognizing Iraq's severe and growing water scarcity, it is essential to pilot, evaluate and roll out innovative solutions to ensure safe water is available in sufficient quantity to meet the needs of children, young people and women, especially girls and children with disabilities. Instead of one-size-fits-all solutions, stakeholders in Iraq should design solutions that are appropriate for specific needs and contexts, ensuring that there is local capacity, expertise and motivation amongst service providers to maintain and scale up solutions, and that communities, led by young people, demand the services they need for a safe, hygienic environment for children.

Priority areas include assessing the availability of new water resources and improving the efficiency of existing ones, planning for urban scarcity in the near and long term, designing climate-resilient and energy efficient water sources and storage, working with communities and schools to conserve and protect water, and supporting local, governorate and national level data collection and planning for effective water use.

Improve access to equitable and inclusive water-efficient WASH facilities in schools.

Schools are critical sites at which to maintain children's health, hygiene and wellbeing and increase knowledge among children and families of appropriate use of water and improved hygiene practices, including menstrual hygiene.

Equitable, water-efficient and climate-smart WASH facilities that are designed to be accessible and inclusive for all children and young people, including girls and boys and those living with disabilities, must be prioritized. This will require inter-sectoral coordination between key sectors such as health, education and WASH, and would benefit from close community oversight for implementation and sustainability, such as through school-based management committees and the Governorate Education Sector Plans supported by the government of Iraq.

Develop consensus on equitable and inclusive water governance and resource management frameworks with the engagement of young people.

Disputes over water sharing regularly arise among governing institutions and are likely to grow as water scarcity worsens. These contribute to rural unrest and displacement, pose demands on urban service provision, and reduce trust in government.

Developing consensus to establish and implement equitable water governance and natural resource management frameworks is critical to address these and establish safe and clean environments for all children especially girls.

With training on conflict resolution and natural resource management, young people have an important part to play in the equitable and future-looking distribution of resources, and to advocate for their effective management.

Build in-country capacity on water governance, natural resource management and climate change response.

There is an urgent need to build government capacity and political will at multiple levels and across service providers, and to advocate for policy development on water governance and natural resource management. This includes, for example, effective tariff setting, and ensuring that the water law, water master plan and other government policies include a child and climate change lens.

Sustained integration of climate change requires specific capacity building for counterparts in local government to ensure they are aware of climate change, prepared for risks and build early warning and response mechanisms where possible.

Increase focus on health risks and impacts on mothers, newborns, children and young people due to climate change, including investments in surveillance and prevention measures for diseases associated with Iraq's climate risk profile.

The proposed climate change unit at the Directorate of Public Health is a key entry point for advocacy to bring health impacts on children to the fore in health planning, and should ensure youth voices, especially girls' voices, are included at every stage.

An assessment utilizing the UNICEF-supported assessment and geographic information system (GIS) mapping of health facilities and catchments will improve understanding of health-related vulnerabilities, population movement, priority setting and resource allocation. This exercise will be most effective if conducted in collaboration with other ministries and partners and will help identify other population data that can be incorporated to understand health risks associated with Iraq's climate risk profile.

Social and behaviour change around health – including protecting against vector-borne diseases and alleviating the health impacts of heat stress – will be crucial to raise awareness and help communities adapt.

Monitor health risks to ensure early and effective response, especially for mothers, children and young people.

Including health indicators related to climate change impacts in information management systems and electronic child health records will enable effective tracking and response. This will also require support for development capacity in spatial analysis. Monitoring drought-linked food security issues will provide data on nutrition, build political will, and ensure that children in need benefit from nutrition-specific interventions.

By identifying climate-change-induced health risks, health authorities can effectively prioritize interventions and geographical locations, guide resource distribution and support capacity development planning that responds to emerging health needs.

Improve resilience of health facility infrastructure, including solarization.

There is an urgent need to map vulnerable communities, review climate resilience of health infrastructure, and make facilities more resilient to floods, dust storms and drought.

Given the power challenges in Iraq, the solarization of health system (facilities and cold chain) should be accelerated, with opportunities created for youth to participate in this emerging green economy.

Solarize learning facilities and incorporate disaster risk reduction in design.

Schools should be solarized in coordination with school capacity-building and youth skills development programmes. A unified package will enable schools and teachers to benefit from solarization while building capacity on climate change and renewable energy, disseminate climate change messaging and provide opportunities to train and engage young people in solar installation, operation and maintenance as opportunities for green jobs.

Disaster risk reduction should be a consideration in selecting sites and designing school structures appropriately for local hazards (floods, drought, extreme temperatures, earthquakes etc) and thus make students and learning infrastructure resilient.

Integrate meaningful climate change learning and gender-responsive disaster risk reduction in schools, life-skills curricula and pedagogical studies for teachers and school administrators.

The Ministry of Education is currently reviewing the curriculum and planning to establish a committee to add climate change to extracurricular activities and school curricula. This, along with education sector planning processes, is a critical entry point for introducing meaningful education on climate change and disaster risk reduction across Iraq.

Effective climate change learning should be based on a mapping of existing curricula and opportunities for integrating climate change and how the topic can be embedded in existing subjects. Climate change can be integrated into existing and new life-skills curricula taught in youth centre and tailored to age groups. Disaster risk reduction education can cover key risks including earthquakes, floods and drought. These should be supported by building pedagogical capacity in teachers on educating children about climate change impacts, response and preparedness.

Community engagement in education, such as through school-based management committees offer another entry point to introduce contextualized climate change learning, disaster risk reduction and activities such as recycling, solarization and broadened community engagement.

Integrate climate change into social protection policies and programmes.

As the national social protection strategy is developed, there is a clear opportunity to integrate climate change, and thus help reduce the vulnerability of the poorest and most marginalized girls and boys and their families. The strategy development process should integrate youth advocates, particularly on climate change issues.

As in other sectors, there is an urgent need for data on child poverty, including climate change, and for mapping vulnerability and risk.

There are substantial opportunities for cross-sectoral collaboration, such as mechanisms to monitor school attendance and child labour, especially in agriculture; monitoring migration and displacement; child protection referrals to strengthen coping mechanisms; building on GIS mapping in health to link vulnerable girls and boys to services; and strengthening national information and early warning systems for food security, agriculture, water and the environment.

Social protection systems should be analysed to assess their shock responsiveness, preparedness for risks and to identify opportunities to include new populations or provide additional services. Merging existing social protection systems and enhancing interoperability will help reach more people in crises and ensure systems account for migration.

Train family and child case workers to monitor impacts of climate risk on vulnerabilities and support improved gender-responsive and inclusive social policy schemes to reduce vulnerability.

With Iraq in the process of strengthening its social protection system, there is an opportunity to enhance its shock-responsiveness in the face of climate change. Additionally, ground is being laid for a national strategy to support people with disabilities, through an inclusive climate response that recognizes the multiple vulnerabilities that children and young people can face.

Capacity-building for the social service protection workforce gives an opportunity to ensure that caseworkers are able to recognise, monitor and respond to climate risks and help ensure that social protection support reaches the most vulnerable.

EMPOWER

Bring children and young people to the centre of strategies, policies, programme design, planning, innovation and implementation.

Existing climate policy documents rarely mention children or young people, let alone highlight their unique needs and rights in the face of climate threats. Iraq's new government and development partners have a unique opportunity to address this.

Children and young people, especially girls, should be included in the green paper, in updates to Iraq's NDCs, and in the NAP which is currently under development with UNDP support.

Enhance public understanding and change behaviours around climate change through gender-transformative programming, recognizing that 60 per cent of Iraqis are under the age of 24.

Contextualized social and behaviour change campaigns responding to climate risks are essential for sustained inclusion, engagement and disaster risk reduction. Young people are crucial to these efforts.

With climate migration likely to grow, resilience and adaptation measures for displaced families is crucial. Families should be made aware of climate change impacts and resilience measures at the household level and of harmful coping mechanisms (school dropout, separation, early marriage, etc.).

Recognize young people as agents of change in climate change action, build their ideas, innovations and actions for adapting to and mitigating climate change impacts into sectoral strategies, policies and programmes.

Existing mechanisms, such as youth centres and volunteering opportunities, should be utilized to develop platforms for engagement and draw young people into national conversations about climate change issues, encourage them to voice their concerns and participate in knowledge-sharing and communication activities.

- Use the opportunity afforded by COP28 taking place in the region in 2023 to use Local Conferences for Youth as a platform for youth engagement.
- Utilize the National Youth Volunteering Platform to bring young people to work on green social and civic engagement opportunities and receive training from partners on climate change.
- Include green skills/ green jobs in the learning to earning agenda.

- Encourage young people to engage in participatory action research to shape climate change knowledge and reach other youth.
- Create opportunities for youth to innovate on climate change solutions.
- Take into account climate anxiety and depression among young people and seek to address it through developing the green economy, health services and youth engagement.
- Assess impacts of rising heat on quality skilling and learning and how to mitigate these impacts on the health and future prospects of girls and boys.

Generate evidence on children and climate change

There is an urgent need for disaggregated data and evidence on indicators related to children's rights and wellbeing in Iraq, particularly through the lens of climate change impacts to guide policies and plans that reduce children's vulnerabilities to climate change risks. Children and climate change should be mainstreamed throughout standard assessment tools and resources to ensure responsive decision-making. This includes evidence generation by young people through discussion forums and online tools. Evidence generation to inform mitigation and adaptation measures should recognize that not all children and young people are the same and that their vulnerability to climate risks varies.

Monitor gender-related indicators and their correlation with climate risks

Girls and boys experience climate change differently. Understanding these differences is crucial for equitable, inclusive and gender-sensitive programming. Gender and geographical indicators should be monitored and analysed to gain a granular understanding of evolving climate threats and their differential impacts, advocating for inclusive and equitable climate action and resource allocations.

ENACT

Promote sustainable energy through sustainable procurement and climate safeguarding for programmes, including (but not exclusive to) construction, supply chain transport, warehousing and other organizational operations of vendors that impact on emissions.

All public procurement should integrate requirements, specifications and criteria that are compatible with environmental protection and social progress as well as economic development. These three pillars should apply to the entire procurement process before, during and after procurement, and cover suppliers, manufacturers, transport, freight and supply delivery.

The United Nations and its partners promote green premises management to reduce emissions and improve internal water management, sanitation, energy consumption and other measures to demonstrate good practices while also mitigating climate impacts.

In the face of Iraq's vulnerability to climate change, the United Nations and its partners can draw on global experiences and expertise to "walk the talk" and demonstrate best practices in environmental sustainability and climate change.

Environmental governance constitutes the overall approach of the United Nations Strategy for Sustainability Management (2020–2030).¹¹⁸ Under the Greening the Blue initiative, United Nations agencies seek to transition towards environmental sustainability and share best practices to improve environmental sustainability in facility management and operations, reduce greenhouse gas emissions (including from premises management and travel); address waste, water usage and air pollution; and integrate biodiversity.

6.3 Recommendations for UNICEF Iraq to enhance its climate change response

UNICEF Iraq should enhance its climate change response based on the global Strategy for Climate, Environment, Energy and Disaster Risk Management (2022–2030) which identifies six priorities and areas of comparative advantage supported at regional and global levels. In Iraq these translate to:

PROTECT

Generate evidence

UNICEF Iraq should conduct analysis and generate the right information so we and our partners can prioritize children most in need, in the most efficient way.

Incorporating climate into key data collection exercises including MICS 2023, and feeding data into the new country programme processes, is critical to address climate change, environmental degradation, unsustainable energy generation and disaster risks in a gender-responsive and child-centred manner. Routinely and consistently addressing these risks and opportunities in all stages of the programme cycle, from planning to formulation, implementation, monitoring, and evaluation, is needed for child rights-focused programming that responds to new realities. As climate change impacts evolve, moments of reflection and updated data will be essential to make changes, update climate change analyses, and reprioritize as needed.

Given the vulnerability of Iraqi children and youth to climate change, UNICEF should develop evidence-based climate rationales for support, with a clear focus on environmental and social safeguarding and on measuring impacts of environmental programming.

The UNICEF policy and procedures on environmental and social safeguarding ensure that programming maximizes environmental and social opportunities and ensures that adverse risks and impacts are avoided, minimized, mitigated, and managed. This is also a key requirement of many donors and all climate funds.

Internal capacity building is required to understand how climate change response and environmental and social safeguarding support each other.

Documenting lessons learned will allow for improved understanding and showcase the office's environmental and social safeguarding work. Environmental and social safeguarding should also be included in micro-assessments and HACT for continual monitoring, and incorporated into project documents.

The office should also implement cross-sectoral monitoring of social and behaviour change interventions on climate change and plan for documenting and measuring impact.

Implement resilient services at scale and deliver supplies

UNICEF Iraq should aim to deliver life-saving supplies to children, reduce risks around disasters and climate shocks, and providing climate and environmentally-smart social services, including in WASH, health, education, nutrition, child protection and social protection.

To respond to emerging complex challenges, WASH and health programmes should be designed through a holistic climate change lens and integrated with other UNICEF goal areas as well as youth engagement, advocacy, gender and social and behaviour change. With UNICEF support, clean energy in schools and health facilities should be implemented.

Monitoring the impacts of climate on children's health, adapting guidance and building skills to ensure appropriate coverage and access to health services will help ensure resilient and equitable service delivery in a context of climate change.

UNICEF-supported WASH pilots on recharge dams, rainwater harvesting and water safety planning, and the bottleneck analysis, respond to Iraq's urgent needs around water scarcity. These should be evaluated for impact and scalability to lay the groundwork for strategizing in the next country programme.

In education, UNICEF should support school curricula and pedagogical studies, and support development of life skills within the emerging green economy. Effective, equitable social and behaviour change interventions aimed at youth and decision-makers will support broader youth-led action around climate change.

UNICEF programme design should also integrate measurement and documentation of environmental and social sustainability and ensure this is adequately reported to donors.

Develop and shape markets

UNICEF should use its convening power to build new partnerships between the private and public sectors to create shared value and sustainably provide goods and services, and mobilize the broader business community's contribution to addressing climate and environmental risks and disasters.

Internally, UNICEF should review internal procedures, integrate climate resilience and sustainability, and explore green contracting, green facilities management, green staff operations and safeguarding.

EMPOWER

Strengthen capacity of partners

UNICEF should work with communities, governments and public and private institutions to better understand climate risks, the green transition, and ways to build resilience to disasters and longer-term climate and environmental shocks.

This includes engaging climate change specialists at key ministries, including at the Ministry of Education, Ministry of Youth and Sport, Ministry of Construction, Housing, Municipalities and Public Works, and collaborating with partners including in the Ministry of Labour and Social Affairs, Ministry of Planning, Ministry of Justice, Ministry of Health and potentially other areas.

It also includes engagement with youth-led groups to build their capacity to enact inclusive, gender-responsive climate plans and promote jobs in the green economy.

Advocate for children and young people

UNICEF Iraq should utilize its voice and credibility so that decision-makers act in the best interests of children, and an enabling environment is created in which climate and environmental policies are directed to children and sustainably financed.

This includes planning, implementing and monitoring an inclusive and gender-responsive climate change advocacy strategy that actively addresses key UNICEF areas of intervention.

UNICEF should lead the implementation of its climate change advocacy strategy through the development of an advocacy results framework that will keep children and climate change at the centre of policymaker, donor and public awareness.

Lessons learned from UNICEF's human-centric design approach to social and behaviour change should feed into the development of a long-term cross-sectoral social and behaviour change strategy with young people as key stakeholders.

Support children and young people

UNICEF should ensure that the voices, perspectives and ideas of children and young people are heard at the highest levels, and that they have the education and skills necessary to act as agents of change in their communities.

Partnerships with green youth-led organizations, including women and girl-led organizations, school programmes (vocational and university), and youth advocates will promote their active engagement in national policymaking processes.

Prepare and empower children and young people to learn, activate and advocate to develop pathways for knowledge and skills building, individual and collective climate action, and strong advocacy to become effective champions of sustainability, and to lead in the creation of a more sustainable and resilient future.

ENACT

Develop and shape markets

UNICEF should convene and build new partnerships between the private and public sectors to create shared value and sustainably provide goods and services, and mobilize the broader business community to contribute to addressing climate and environmental risks and disasters. This includes green contracting, green facilities management, green staff operations and safeguarding, in line with the United Nations Sustainability Strategy (2020–2030) and the UNICEF Procedure on Sustainable Procurement.¹²⁰

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