



**2024**  
**February**

**Race to Climate Resilience: Front-Runners and Laggards in Advancing on Adaptation**



**Sustainability Research Paper**

The Al-Attiyah Foundation



The Al-Attiyah Foundation is proudly supported by:





Anthropogenic climate change is one of the most pressing global societal challenges and has a profound global impact worldwide. The Gulf Cooperation Council (GCC) countries present an intriguing case study due to their unique combination of high-income status and high vulnerability to climate change. As high-income economies recognised by the World Bank with a combined GDP surpassing USD 3.5 trillion, and status as leading oil producers and exporters, these nations offer a distinctive perspective on managing climate change impacts in affluent regions. Which countries in the region are frontrunners in adaptation efforts? Which countries have built upon existing national adaptation plans and undertaken activities funded by the Adaptation Fund (AF) and the Green Climate Fund (GCF)? Which countries are falling behind and require further engagement to tackle their climate change vulnerability challenges effectively?

## SUSTAINABILITY RESEARCH PAPER

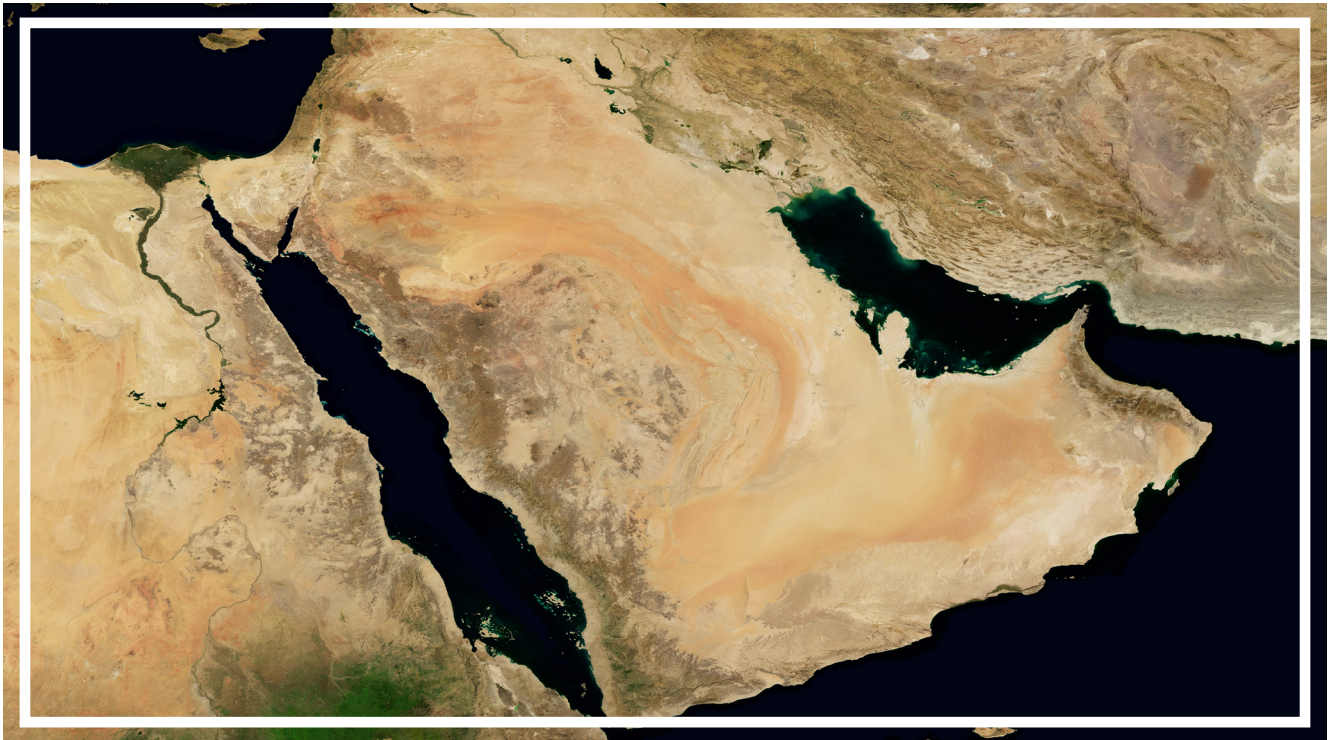
This research paper is part of a 12-month series published by the Al-Attiyah Foundation every year. Each in-depth research paper focuses on a current sustainability topic that is of interest to the Foundation's members and partners. The 12 technical papers are distributed to members, partners, and universities, as well as made available on the Foundation's website.



- The assessment of Gulf countries' efforts in climate change adaptation highlights varying degrees of progress and challenges across countries.
- The United Arab Emirates (UAE) emerges as a frontrunner among the Gulf countries in addressing climate change for its proactive approach in addressing climate change risks and vulnerabilities, evidenced by its comprehensive adaptation component in the latest NDC and the initiation of a roadmap for its National Adaptation Plan (NAP) in 2023.
- The UAE's strategies encompass a wide range of sectors, including energy, infrastructure, health, and food systems, highlighting its readiness and strategic planning to tackle climate change impacts effectively. Kuwait also stands out as the first Gulf country to publish a well-articulated NAP.
- Despite acknowledging their vulnerability to climate change impacts, Qatar and Saudi Arabia need detailed adaptation plans and clear implementation strategies. It should also be stressed that extreme weather events have led to significant losses of life and property in Saudi Arabia as recently as the 2010s.
- Oman and Bahrain are looking forward to mobilising international climate finance to improve their adaptation preparedness and leveraging external support for adaptation. The question is whether any public climate finance providers are eager to fund adaptation in relatively wealthy Gulf countries.
- Bangladesh, despite its high vulnerability and status as a least developed country, offers valuable lessons for the Gulf region in proactive climate change adaptation. This includes emphasising integration into national development strategies, visionary initiatives like the Delta Plan 2100, and proactive and highly innovative financing solutions through initiatives like the Bangladesh Climate Change Trust Fund. Also, in terms of actual adaptation Bangladesh has been highly successful in limiting casualties of meteorological extreme events like cyclones.
- To enhance readiness and resilience to climate change impacts, Gulf countries should prioritise adaptation actions which can lead to adaptation outcomes, leverage international climate finance mechanisms or innovative finance, foster collaboration across sectors and stakeholders and deepen their regional cooperation.







Climate change has a profound global impact worldwide.<sup>i</sup> The Gulf Cooperation Council (GCC) countries - Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the UAE- located in the arid Arabian Peninsula surrounding the Persian Gulf, present an intriguing case study due to their unique combination of high-income status and high vulnerability to climate change. These countries with a combined GDP surpassing USD 3.5 trillion<sup>ii</sup>, and status as leading oil producers and exporters, offer a distinctive perspective on managing climate change impacts in affluent regions. Much of the region is already experiencing rising temperatures, unpredictable and extreme weather patterns and water scarcity due to climate change that pose risks to human health and livelihoods and threaten economic stability.<sup>iii</sup> Record high temperatures have already been observed, reaching up to 53.9°C in Kuwait in 2016, an Asian record level <sup>iv,v</sup> and early summer heat waves exceeding 50°C in Oman and the UAE.<sup>v</sup>

Even if global warming is limited to an increase of 2°C compared to pre-industrial temperatures, temperatures in the Gulf region are expected to rise far beyond this, with some climate studies predicting an increase of up to 5°C by the end of the century.

<sup>vi</sup> The studies further indicate that this rise in temperatures will be accompanied by extreme weather events (such as heat waves) in an unprecedented scale, which will have severe impacts for health and well-being of the around 56.4 million people living in the region.<sup>vii</sup> Some researchers even foresee parts of the region to become uninhabitable as the maximum temperature level humans can sustain will be exceeded.<sup>viii</sup>

Pre-existing water scarcity, exacerbated by climate change, is a critical issue, with all six Gulf countries already ranking among the top 25 most water-stressed countries globally.<sup>ix</sup>

The Gulf region relies heavily on non-renewable aquifers that were filled during past moist periods and currently have a negligible rate of recharge for its water supply as renewable water sources are extremely limited, leading to intense competition and unsustainable depletion of water resources.<sup>ix</sup> The Gulf region's water demand is expected to further rise due to population growth, urban expansion, and agricultural and industrial development, which pose an additional threat to water resources. To cope with the increasing water scarcity, the region has adopted various strategies and innovative approaches, including water desalination (accounting for 45% of the global desalination capacity<sup>iv</sup>) and water use efficiency measures. In that context, countries such as Qatar, Bahrain, and the UAE secure nearly 90% of their food from imports, as water scarcity and limited arable land restrict the possibilities for self-sufficiency. To increase self-sufficiency and address climate risks to the agricultural sector Gulf countries such as Qatar have implemented measures such as efficient water-conserving irrigation techniques and advanced cooling technologies to reduce food losses and ensure sustained food availability<sup>x</sup>.

Despite a general decline in annual rainfall in the region, there has been an increase in extreme precipitation events such as erratic, heavy rainfall and flooding, which are likely to be exacerbated by climate change.<sup>vi</sup> The devastating flash floods in Saudi Arabia and several devastating cyclones in Oman in recent years, which caused considerable human and economic losses, are just two examples.<sup>iii</sup> Compounding these challenges, the frequency of sand and dust storms has escalated, exacerbated by higher temperatures, desertification, and drought, notably affecting Saudi Arabia, Kuwait, and the UAE, reducing

the already limited land available for food production<sup>xi</sup>. Moreover, the majority of the regions' population live in mostly coastal urban areas, which are affected by rising sea levels<sup>2</sup>, particularly Bahrain, the UAE, Oman, and Qatar.<sup>iv</sup>

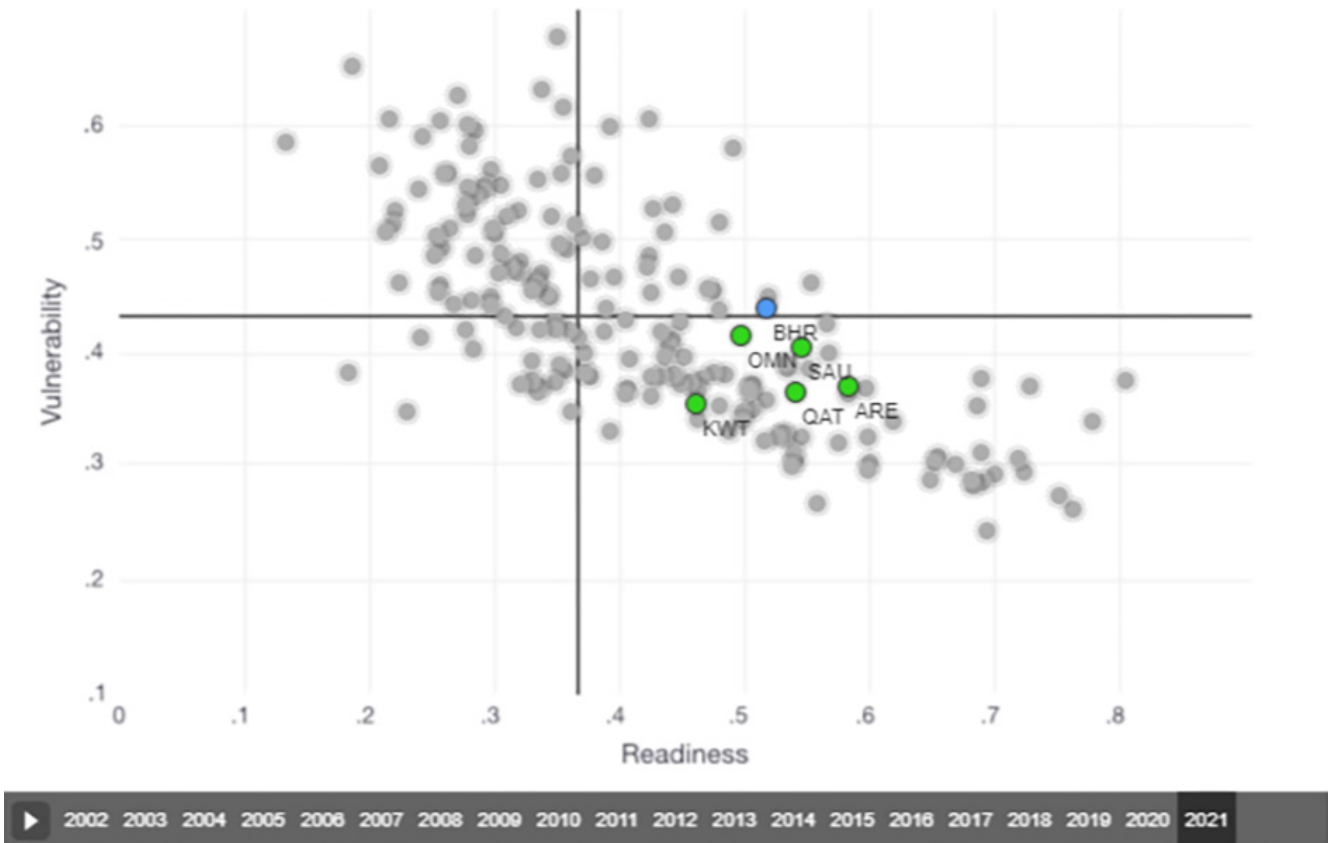
Despite these vulnerabilities, according to the Notre Dame Global Adaptation Initiative (ND-GAIN) Index<sup>xii</sup> (see Figure 1) the comparative resilience of the Gulf countries to climate change is higher than the world average.

According to the Index<sup>xiv</sup>, the UAE, Qatar (QAT), Saudi Arabia (SAU), Oman (OMN), and Kuwait (KWT) are positioned in the lower right quadrant, indicating they are ranked with a relatively low vulnerability (e.g. to countries in the upper left quadrant).

In the absence of ambitious global mitigation action, climate change impacts will intensify and put an increasing stress on natural and human systems. As such, the adoption of adaptation strategies is becoming increasingly vital. The iterative Adaptation Policy Cycle (APC) (see Figure 2), as outlined by the United Nations Framework Convention on Climate Change (UNFCCC), provides a structured approach for identifying and operationalising adaptation strategies that reduce vulnerability and enhance resilience and adaptive capacity.<sup>xvii</sup> The first stage of the APC involves identifying the current and projected impacts of climate change on various sectors and conducting vulnerability and climate risks assessments to understand which areas and communities are most at risk of climate change impacts. Looking at the positioning of the Gulf countries on the ND GAIN index, as shown in Figure 2 above this vulnerability is low, with the exception of Bahrain, while all countries are considered to have a high readiness for adaptation action. Based on the index, the



Figure 1: Comparative Resilience of Gulf Countries in the ND-GAIN Index



Gulf countries seem to be among the countries well positioned to address climate change given their strong national economies and governance systems that create favourable (private sector) investment conditions and can support financial flows for adaptation.<sup>xv</sup> Subsequent phases of the APC involve strategic planning and policy adjustments in response to the unique circumstances of each country and the implementation of these plans, and finally undertaking continuous monitoring, evaluation and learning (MEL) to gauge the effectiveness of these strategies and control for maladaptation (maladaptation occurs when activities intended to reduce the impacts of climate change but actually increase risk and vulnerability).

<sup>xvi</sup> The APC underscores the importance of

financial resources, capacity building, and technology transfer (also called 'means of implementation') at each stage to ensure effective adaptation measures.<sup>xvii,xviii</sup>

Against this backdrop, this paper seeks to explore the front-runners and laggards in advancing on adaptation within the Gulf region. To do so, the countries' progress is evaluated based on adaptation planning, which can provide more nuance to the countries' readiness and progress made on implementation as in the APC in relation to their relative vulnerability ranking on the ND-GAIN index.

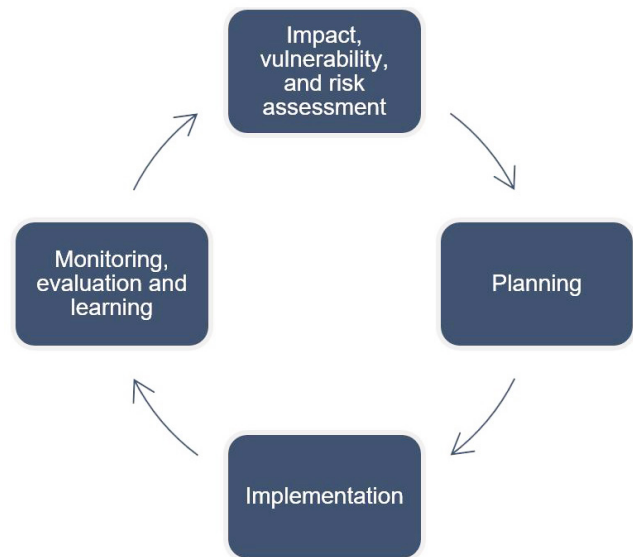
## I. Policy and Planning

To understand progress made on adaptation planning in the Gulf countries key publicly available policy documents such as NDC, National Adaptation Plans (NAPs) and national sectoral policies have been reviewed and we provide a short overview of each country below:

**Bahrain** is ranked the 82<sup>nd</sup> most vulnerable country on the ND-GAIN Index (making it the most vulnerable country in the Gulf region). As a small island developing state (SIDS) with arid conditions, Bahrain faces unique challenges in comparison to the other Gulf countries. Bahrain submitted its updated NDC in 2021<sup>xiv</sup> which highlights the country's climate change vulnerability and aims at adaptation involving water, agriculture, biodiversity, and urban development. The NDC includes an adaptation component with a list of adaptation measures being undertaken, including the development of a National Adaptation Investment Plan (NAIP), which is expected to include a list of priority adaptation actions, strategies for coastal zones and water resources and other adaptation actions with mitigation co-benefits such as the national afforestation plan and mangrove habitat protection.

**Kuwait** ranks as the 146<sup>th</sup> most vulnerable country in ND-GAIN Index. Kuwait submitted its updated NDC in 2021 which includes an adaptation component. Key climate risks in the NDC include rising temperatures, scarce rainfall, rising sea levels, limited water sources, and increasing intensity of dust storms and their impact on the economic, social and health sectors. Kuwait is also the only Gulf country that has introduced a NAP<sup>xx</sup> which provides a comprehensive overview of the country's climate risks and is designed to enhance

Figure 2: Adaptation Policy Cycle



Source: Own elaboration based on [UNFCCC \(n.d.\)](#)

resilience and reduce the vulnerability of key sectors, such as coastal zones, water resources, human health, fisheries, and marine health. The NAP further proposes an institutional coordination framework to mainstream climate change adaptation in relevant sectors and institutions.

**Oman** is ranked the 97<sup>th</sup> most vulnerable country on the ND-GAIN Index. In its first update of the second NDC submitted in 2023<sup>xxi</sup>, Oman acknowledges its climate vulnerabilities, which are exacerbated by its hot, arid desert climate. These include rising temperatures and declining annual precipitation and unpredictable rainfall patterns, as well as extreme weather events such as floods and cyclones. The NDC contains an adaptation and resilience component, which provides a detailed analysis of adaptation measures currently in place or planned by Oman in key climate-sensitive sectors. These sectors include water resources, fisheries, agriculture, coastal





management, urban infrastructure, disaster preparedness and public health. However, it does not provide a specific timeframe for these actions nor the associated costs for implementation. Additionally, Oman introduced a 20-year National Strategy for Adaptation and Mitigation to Climate Change (2020-2040) in 2019 which examines the vulnerabilities of the priority sectors to climate change impacts. It is currently developing its NAP with support from the GCF and the United Nations Industrial Development Organization (UNIDO). Notably, Oman has also secured USD 5.2 million from the GCF for readiness activities including support for its NAP process and strengthening capacities of the government, agriculture, and water-sector stakeholders.<sup>xxii</sup>

**Qatar** is among the top 10 countries regarding per capita GDP. Qatar's NDC highlights its vulnerability to current and future climate risks, including rising sea levels, flooding, and increasing temperatures, with impacts on

its population, marine life, tourism, food and water security. Qatar submitted an updated NDC in 2021 with an adaptation component that highlights the importance of actions with mitigation co-benefits in water management, infrastructure, awareness, and food security. However, it does not articulate priority adaptation actions. Qatar is currently engaged in a national adaptation planning process to identify and address its medium- and long-term priorities as part of Qatar's broader development strategy. This builds on a recent vulnerability and impact assessment exercise that mapped the most affected sectors and the assets within those sectors.

<sup>xxiv</sup> The National Environment and Climate Change Strategy and National Climate Change Action Plan 2030 (NCCAP) serves as strategic frameworks for addressing both adaptation and mitigation.<sup>xxv</sup>





**Saudi Arabia** is the largest economy in the Gulf region. Saudi Arabia has repeatedly suffered from catastrophic impacts of meteorological extreme events, particularly flooding in Jeddah.<sup>xxvi</sup> Its updated NDC submitted in 2021<sup>xxvii</sup> emphasises the country's vulnerability to the impacts of climate change and points out that 76% of its land is not arable and that it faces acute water scarcity. The NDC highlights adaptation mainly through actions with mitigation co-benefits in key areas such as water and wastewater management, marine protection, desertification reduction, and urban planning. It further commits to undertaking adaptation actions in integrated coastal zone management planning, developing early warning systems, building urban climate resilience, and integrated water management planning. However, it is unclear to what extent the NDC's adaptation component is aligned with other national and sectoral plans and

national initiatives. To date, Saudi Arabia has not submitted a NAP, and it is unclear whether it is planning to do so.

The **UAE** is ranked the 132<sup>nd</sup> most vulnerable country in the ND GAIN index and further considered the most advanced of the Gulf countries when it comes to addressing climate change challenges. In 2016, the UAE submitted its first NDC highlighting the anticipated climate change risks, which include increasing temperatures, more frequent and severe extreme weather events, unpredictable rainfall, and rising sea levels.<sup>xxix</sup> According to the UAE, these risks may impact critical infrastructures, such as desalination and power plants, coastal habitats, agriculture, and food systems. In the latest NDC<sup>xxx</sup>, the UAE provides a more comprehensive adaptation component with prioritised adaptation actions in energy, infrastructure, health, environment, blue carbon





ecosystems, food systems. The NDC stresses comprehensive risk management, including using insurance schemes. The 2019 National Climate Change Adaptation Programme (NCCAP) is a key component of the UAE National Climate Change Plan 2017-2050. The development of a NAP is envisaged that will systematically identify, prioritise, and implement both short-term and long-term climate adaptation strategies across governmental and non-governmental sectors; in November 2023 a roadmap was unveiled.<sup>xxxii</sup>

## II. Implementation

To further understand adaptation progress by the Gulf countries, the status of adaptation implementation or investment plans and integration of NDC actions into NAPs is assessed. Additionally, where applicable, adaptation projects and programmes supported by multilateral climate funds such as the AF and GCF are discussed.

**Bahrain's** NDC states implementation will depend highly on the level of international support including finance, technology transfer, and capacity building. In view of this, Bahrain has begun to seek financial support as exemplified by its first GCF supported project (SAP003) focusing on water sector adaptation with a USD 2.3 million investment.<sup>xxxiii</sup> Bahrain has no AF funded projects.

In its NAP **Kuwait** highlights several ongoing or completed adaptation measures in the identified key sectors such as the Green Belts and Kuwait Green Wall projects which aim to reduce the impacts of dust and sandstorms, particularly on the health of the population. Furthermore, Kuwait has established new desalination plants in addition to water distribution systems via pipelines and irrigation systems to farmers to increase freshwater availability. However, the country's





NDC indicates that further international technological, financial, and capacity-building support is needed to scale up implementation. So far, Kuwait has not accessed international adaptation financing from the GCF or AF.

**Oman** indicates the implementation of its NDC will rely on a blend of international climate finance, predominantly from the GCF and domestic investments, with public funds covering 20-30% and private sector contributions at 70-80%. Since 2016 the GCF has supported readiness programs. However, documentation on adaptation measures and their financing remains limited. Oman has no AF funded projects.

According to its NDC, **Qatar** has undertaken measures across various sectors, including retrofitting aerators in governmental facilities, switching to treated sewage effluent for irrigation, utilising recycled water in district cooling and construction, and constructing drainage systems. Its NDC highlights its

openness to international cooperation through technical assistance and capacity-building in sustainable technologies. While Qatar has not received funding from the AF or GCF, it was the first Arab country to contribute to the AF with a USD 500,000 donation in 2021 via the Qatar Fund for Development.<sup>xxxiii</sup>

**Saudi Arabia** indicates in its NDC that it has implemented measures for adaptation with mitigation benefits, including energy-efficient desalination, wastewater treatment for irrigation, mangrove planting, coral reef restoration, tree planting against desertification, and sustainable urban projects. Saudi Arabia has no AF or GCF financed projects.

The **UAE** indicates in its NDC that it has implemented several adaptation measures including the deployment of over 2.1 million smart water and energy meters and other energy-efficient technologies to ensure the resilience of energy systems against climate change-induced increased temperatures



across the key sectors, primarily through the NCCAP priorities. The UAE plans to invest AED 134 billion (USD 36.5 billion) in climate measures from 2023-2030, focusing on both adaptation and mitigation. This investment strategy would include creating a favourable environment for foreign direct investment and public-private partnerships. Nevertheless, as the NDC does not clarify the related costs and time frames for the identified actions hence the investment or implementation readiness of the planned measures remains unclear. Recently the UAE has launched the ALTERRA Fund, a private investment vehicle for climate change action, that seeks to mobilize USD 250 billion globally by 2030 and support countries including Least Developed Countries (LDCs) and Small Island Developing States (SIDS) to access climate finance.<sup>xxxiv</sup> This suggests the UAE is committed to contributing to increasing climate finance for more vulnerable countries, including adaptation finance.

Building on the analysis of the countries' adaptation planning and implementation of prioritised adaptation actions (see Table 1 for brief overview), applying expert judgement we apply three criteria to identify the front runners and laggards:

- (i) Countries have well-developed and integrated adaptation policies, as evidenced by comprehensive adaptation components in NDCs and NAPs. These policies prioritise adaptation actions across various sectors and align with long-term national strategies.
- (ii) Countries show tangible progress in implementing adaptation measures outlined in their policies. This includes providing cost estimates for adaptation priorities, implementation of adaptation projects, and coordination among government agencies and stakeholders.

- (iii) Countries actively engage with international climate finance mechanisms, such as the GCF or are proactive in committing domestic financial resources to support adaptation measures.







Based on the first criterion, the UAE, Kuwait, and Oman have made notable strides in prioritising actions across key sectors. Moreover, Oman has also been engaging with the GCF readiness programme, a funding mechanism that assists countries in undertaking adaptation planning and developing strategic frameworks to build their programming with GCF.

On the second criterion, Kuwait has made an exemplary effort being the only country that has submitted a NAP to date which provides details on institutional coordination, cost estimates for adaptation priorities and associated timelines. The UAE also provides good overview of its adaptation priorities and indicates in the NAP development plan it intends to make efforts to develop an NAP Implementation plan. For both criteria, Qatar, and Saudi Arabia lag as they are yet

to develop detailed adaptation plans or clear implementation strategies but acknowledge their vulnerability to climate change impacts.

On the third criterion, UAE and Bahrain take the lead as countries that have demonstrated a commitment to mobilising resources and leveraging external support for adaptation efforts. Moreover, Bahrain's project with the GCF is linked to potential adaptation outcomes for its water sector. The UAE and Qatar have further emerged as climate finance donors. As such, the UAE emerges as a clear frontrunner in the region that can act as an example for the other Gulf countries.



Table 1: Overview of the Adaptation Landscape in the Gulf Region

COUNTRY	ND-GAIN INDEX VULNERABILITY RANKING	ADAPTATION COMPONENT IN NDC	NAP	NATIONAL ADAPTATION-RELATED POLICIES AND INITIATIVES	MAIN CLIMATE IMPACTS IN NDC / NAP	IDENTIFIED SECTORS FOR ADAPTATION (NDC / NAP)	PRIORITY FOR ADAPTATION (NDC / NAP)	ADAPTATION FINANCING
Bahrain	82	Yes	N/A	National Adaptation Investment Plan (NAIP)	Sea-level rise, extreme temperatures, water scarcity	Coastal Zones, Water Resources Management, Afforestation, Mangrove Habitats		USD 2.3 million GCF project for water sector resilience
Kuwait	146	Yes	Yes	National Adaptation Plan (NAP), Green Belts project, Kuwait Green Wall project	Temperature extremes, drought, coastal vulnerability, marine ecosystem degradation	Coastal zones, Marine Life and Fisheries, Water Resources, Health, Agriculture		No AF or GCF projects are listed.
Oman	97	Yes	Under development	National Strategy for Adaptation and Mitigation to Climate Change (2020-2040)	Temperature increase, extreme weather events, water scarcity	Water Resources, Fisheries and Marine Resources, Food Security, Public Health, Coastal Sector		No AF or GCF projects are listed; USD 5 million for readiness activities from GCF
Qatar	140	Yes	N/A	National Climate Change Plan; National Environment and Climate Change Strategy (QNE).	Sea level rise, flooding, temperature increase, urban heat island effects	Water Management, Infrastructure and Transport, Food Security		USD 500,000 contribution to the AF; no AF or GCF projects listed
Saudi Arabia	102	Yes	N/A	Saudi National Water Strategy; Saudi Green Initiative	Water scarcity, extreme climate conditions, ecosystem vulnerability	Water and Wastewater Management, Marine Protection, Desertification Reduction/Tree Planting, Urban Planning		No AF or GCF projects listed; focus on domestic finance
UAE	132	Yes	Under development	National Climate Change Plan 2017-2050; National Climate Change Adaptation Programme (NCCAP); National Adaptation Plan Roadmap.	Rising temperatures, extreme weather events (droughts and sandstorms), uncertain rainfall patterns, sea-level rise	Energy, Infrastructure, Health, Environment, Blue Carbon Ecosystems, Food Systems, Insurance		Domestic finance: AED 134 billion (USD 36.5 billion) investment plan (part of which is for mitigation)

Source: [Author Elaboration](#)

This section seeks to briefly showcase examples of best practices in adaptation planning and adaptation strategies that can not only create and improve the enabling conditions for adaptation, but also lead to good adaptation outcomes.

### I. The United Arab Emirates

The UAE's climate adaptation initiatives offer a practical blueprint for resilience and demonstrate the importance of strategic planning sector-specific strategies, and integration into economic planning. This is exemplified by its National Climate Change Plan 2050, launched in June 2017. This plan aims to unify climate efforts through a comprehensive strategy that includes adapting to climate change and promoting economic diversification via private sector-led innovation. As a key component of this strategy, the Ministry of Climate Change and Environment (MOCCAEE)

launched the NCCAP in 2018 to identify and address climate trends and risks and involve stakeholders in the adaptation process.<sup>xxxv</sup> The NCCAP's first phase involved risk assessments in vital sectors, health, infrastructure, environment, and energy, formulating appropriate adaptation measures to address these risks.<sup>xxxvi</sup> This effort highlighted the need for detailed, sector-specific adaptation strategies and the integration of climate considerations into national development planning.<sup>xxxvii</sup>

Some of the achievements in operationalising the NCCAP include key initiatives that ensure adaptation outcomes in critical sectors such as the adoption of technologies to maintain water and energy efficiency despite increasing temperatures and health sector regulations to protect outdoor workers and ensure productivity despite increasing heat stress.



Other adaptation measures include expanding blue carbon ecosystems by planting 100 million mangrove seedlings by 2030 and adopting new climate-smart agricultural methods. The UAE has also introduced urban plans such as the Abu Dhabi 2030 and Fujairah 2040 plans aimed at bolstering urban climate resilience. The UAE has further established a National Committee on Climate Change and Health to address further health concerns related to climate change.<sup>xxxviii</sup> Beyond national efforts, the UAE has advanced in climate adaptation planning at the sub-national and local levels. For instance, the Dubai Climate Change Adaptation Strategy enhances preparedness in crucial sectors, including the environment, food security, energy, water, health, infrastructure, and business at the city level.<sup>xxxix</sup> This approach offers a practical model for other Gulf countries to boost regional climate resilience with sector-specific strategies tailored to local needs.

Building on the adaptation component of its NDC, the UAE indicates in its 2023 NAP Roadmap<sup>xxxi</sup> its plans to include prioritised adaptation actions and the corresponding lead actors supporting actors, timeline, M&E metrics as well as the indicative costs and impacts. These strategies are to be integrated into national development plans aiming at building a project pipeline to enhance the UAE's resilience to climate change. Moreover, the UAE's endeavours to include M&E indicators would be critical ensuring planned actions yield adaptation impacts and will be critical for improving adaptation ambition over time.

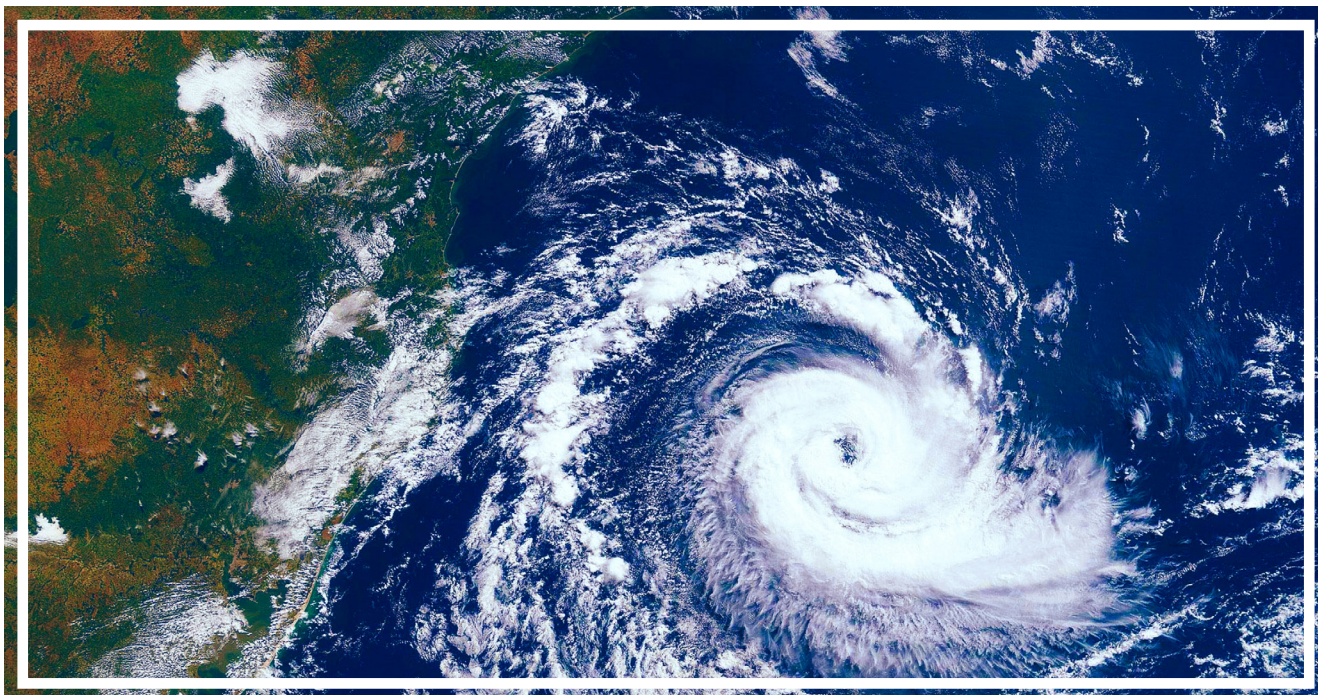


## II. Bangladesh

While its contribution to global warming has been minimal, Bangladesh faces massive impacts from climate change. It is ranked the 30<sup>th</sup> most vulnerable country on the ND GAIN Index. Notwithstanding, Bangladesh has emerged as a leader in advancing adaptation and disaster risk preparedness,<sup>xi</sup> pioneering key national policies and frameworks like the National Adaptation Programme of Action (NAPA) in 2005 to guide the coordination and implementation of adaptation initiatives. Already in 2009, Bangladesh created a national programme, the Bangladesh Climate Change Strategy and Action Plan (BCCSAP), to determine how it would adapt to a changing climate. The BCCSAP emphasises adaptation across five of its six thematic areas: food security, disaster management, infrastructure, research, and institutional strengthening, which has become a blueprint for climate-vulnerable countries.<sup>xii,xiii</sup> In 2018, Bangladesh launched the Bangladesh Delta Plan 2100 (BDP 2100), which integrated the above policies and other sectoral plans.<sup>xiiii</sup> It is considered a visionary initiative aimed at managing the country's water resources and mitigate the likely effects of climate change, including rising sea levels. One of the document's most valuable aspects is that it facilitates an adaptive delta management process which favours flexible strategies centred on gradual interventions over time rather than large, irreversible projects.<sup>xiv</sup> As such, it prioritises investments with minimal regrets and avoids projects that are not resilient to realistic climate scenarios. The government has further developed an investment plan to support the implementation of the BDP 2100 until 2030, estimated to be USD 38 billion for a total of 65 physical infrastructure initiatives and 15 projects







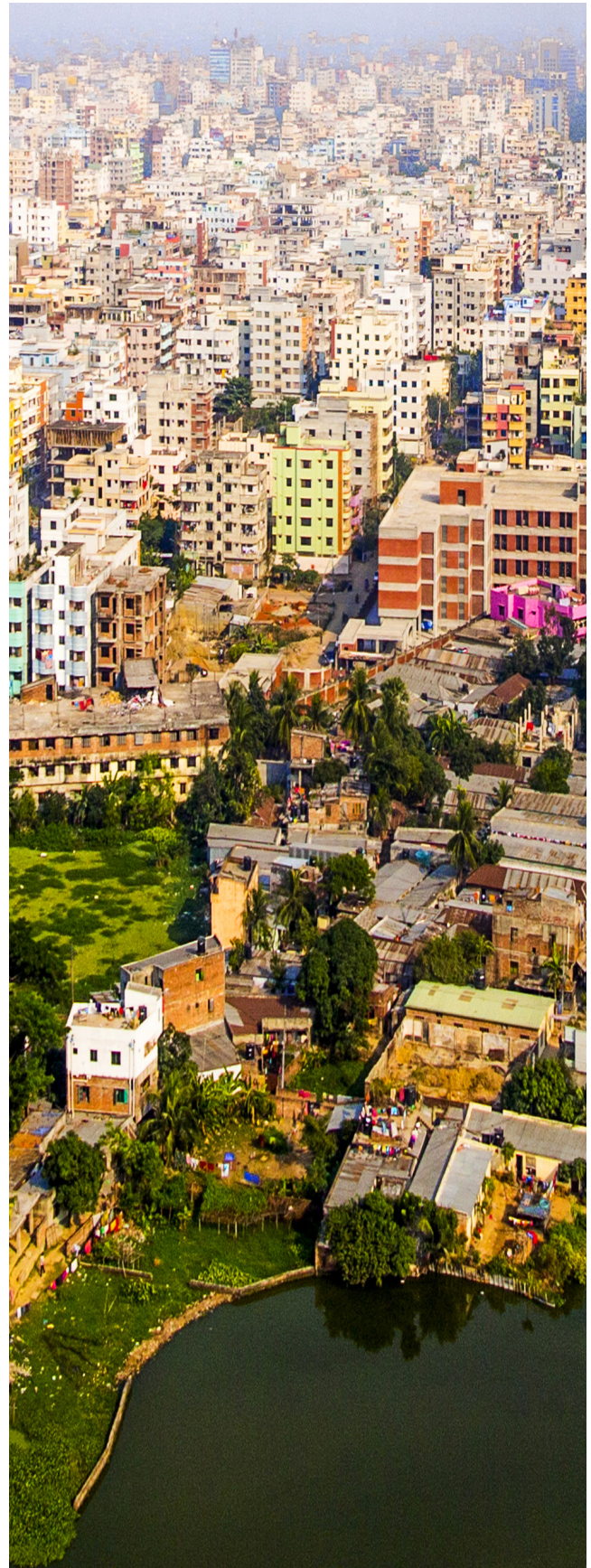
focused on institutional and knowledge development. Notably, both a Delta Governance Council and an inter-ministerial forum, led by the Prime Minister have been established to offer strategic guidance in this endeavour.<sup>xiv</sup> In 2022, Bangladesh unveiled its NAP, which aims to integrate climate adaptation into Bangladesh's national development strategies further, leveraging both scientific research and local insights. Targeting eight critical sectors, the NAP outlines 113 interventions, with 90 identified as high priority and 23 as a moderate priority. These sectors encompass water resources, disaster management, agriculture, urban development, ecosystems, policies, institutions, and capacity building. The plan advocates for an inclusive and coordinated approach to implementation, projecting a cost of USD 230 billion over 27 years.

In recognition of the significant financial requirements to carry out the above-mentioned adaptation actions and the inadequacies of international adaptation finance, Bangladesh set up a Bangladesh Climate Change Trust Fund (BCCTF). The Fund is based on revenue from the national budget, with a legal basis under the Climate Change Trust Act passed in 2010.<sup>xvi</sup> The government's commitment to adaptation is highlighted by allocating up to 7% of its annual budget.<sup>35</sup> Bangladesh has also harnessed international adaptation finance support through several public and private sector projects with the AF and GCF, with over USD 400 million accessed from the GCF alone.<sup>xvii</sup>



The NAP calls for enhanced investment from both domestic and international contributors, highlighting the importance of innovative financing solutions and private sector involvement to meet the ambitious adaptation goals.<sup>35</sup> To this end, in December 2023, Bangladesh launched the Climate and Development Platform, a collaborative effort between the Government of Bangladesh and international partners, including major financial institutions, e.g., the World Bank, bilateral donors, and the private sector. This platform seeks to support Bangladesh's mitigation and adaptation strategies by leveraging significant public and private investments. The platform will include a project preparation facility, fostering an environment conducive to additional private sector investment by generating a robust pipeline of climate projects integrated with a strategic financing approach.<sup>xiviii</sup>

Bangladesh is not only talking about adaptation and planning it, it also is acting decisively. Over the last 30 years, Bangladesh has been able to massively reduce casualties from meteorological extreme events like cyclones – from hundreds of thousands to hundreds per event.<sup>xlix</sup> Bangladesh's proactive and comprehensive approach to adaptation can offer valuable lessons to Gulf countries to enhance their readiness and resilience to climate change impacts. This includes the integration of climate adaptation into development strategies, visionary initiatives that take long-term views in adapting to climate change, fostering innovative financing solutions and private sector engagement.





The information provided by the Gulf countries in their NDCs reflects the severity of climate change impacts they are experiencing and the need for more efforts to advance adaptation actions. The countries identify the impacts of climate change to critical systems such as water, food and nutrition security, energy, infrastructure, cities and urban areas and human health. However, only a few of the Gulf countries have included prioritised adaptation actions and even less the associated costs and timelines for implementation or reference integrating climate adaptation into domestic budgets.

While the UNFCCC does not prescribe a common approach for adaptation in NDCs, countries should view the adaptation aspect of their NDCs as part of a set of coordinated tools for advancing adaptation efforts nationally. Gulf countries should seek to continually place adaptation at the forefront of their national agendas.<sup>3</sup> This can include strengthening

connections between country planning processes with the more comprehensive NAP process which offers a standardised framework to identify vulnerabilities to climate change and deploy targeted strategies that advance adaptation.

It is also crucial that the adaptation policies and plans are made concrete, investment, and implementation ready while ensuring they can yield actual outcomes. As such, policies and actions should be linked to the climate risks and vulnerabilities identified in the priority sectors or systems and accompanied by suitable timelines for implementation. Moreover, as indicated in the fourth step of the APC, establishing a systematic framework for M&E of adaptation is crucial to understand whether the adaptation actions are yielding successful adaptation outcomes and impacts. During adaptation planning, the setting of baselines, targets, and indicators are key to support measuring progress achieved towards



set targets. Countries like the UAE recognise the importance of such systems and indicates making efforts to include this in its NAP. Doing so can also support the mobilization of both public and private sector finance for enhanced climate change adaptation action through the demonstration of actions that have proven to be effective at generating adaptation outcomes.

Finance plays a critical role in implementing adaptation actions outlined in countries' NDCs and NAPs. Limited utilisation of international climate finance is observed in the Gulf countries which is probably due to a reluctance of international public climate finance donors to provide funding to countries that are wealthy in comparison to most others. While international public climate finance sources like the GCF are essential, effective climate adaptation in Gulf countries will require securing diverse financial resources including from private sector investments to advance adaptation. Moreover, integrating adaptation into national budgeting processes as demonstrated by Bangladesh can increase fiscal support for initiatives to tackling climate change in the Gulf. This implies that the Gulf countries should focus on refining costing methods and harmonising them with existing initiatives to incorporate climate change risks into their national budgets, thus establishing reliable cost projections. These steps are also crucial for crafting pragmatic and realistic NDC and NAP investment plans. Strategic plans to attract finance should include exploring approaches to make investment opportunities appealing to the private sector and ensuring high-priority adaptation projects efficiently utilise resources. Innovative financing strategies –such as local climate-specific funds and green bonds, can further leverage additional resources for adaptation.

The Gulf countries demonstrate shared climate vulnerabilities including as water stressed nations with additional threats to food security and health as climatic conditions worsen. This necessitates joint adaptation strategies and action plans.<sup>iii</sup> The countries should endeavour to deepen existing regional cooperation that can support managing the transboundary effects of climate change such as desertification within the Gulf region. Such cooperation can support the Gulf countries to coordinate adaptation action, develop and execute shared adaptation initiatives, engage in knowledge sharing and identify best practices, and collectively enhance their capacity to confront climate change. Additionally, regional cooperation can strengthen the Gulf countries' negotiating position in international climate discussions, potentially leading to more ambitious global adaptation action.





All Gulf countries have included an adaptation component in their NDCs, which is evidence that adaptation is an important area of focus. While countries in the Gulf region have taken significant steps towards climate change adaptation, notable gaps in their efforts remain that require urgent attention. These gaps include the need to prioritise adaptation actions, integration of adaptation strategies in development planning, and underdeveloped implementation plans.

The assessment of Gulf countries' readiness and efforts towards climate change adaptation further reveals varying degrees of progress and challenges. The UAE emerges as a frontrunner, with robust policies like the National Climate Change Plan 2050 and comprehensive adaptation strategies outlined in its NDC while Kuwait demonstrates notable advancement by being the only Gulf nation to have submitted a NAP, outlining sector-specific adaptation

measures and implementation plans. On the other hand, Bahrain lags, partly due to limited capacities and resources for comprehensive adaptation strategies, as highlighted in its NDC but has made efforts to access climate finance from the GCF to address adaptation. Although Qatar and Saudi Arabia acknowledge their vulnerability to climate risks in their NDCs, they need detailed adaptation plans and clear implementation strategies.

By addressing these gaps, drawing lessons from both within the Gulf such as UAE and Kuwait or adaptation pioneers such as Bangladesh, Gulf countries can significantly enhance their climate resilience. Through concerted efforts and collaboration, Gulf countries can further enhance their readiness and resilience to climate change impacts.



- i IPCC (2023): Sixth Assessment Report, <https://www.ipcc.ch/assessment-report/ar6/> (accessed February 13, 2024)
- ii World Bank Group (2023): World Bank Group country classifications by income level for FY24, <https://blogs.worldbank.org/opendata/new-world-bank-group-country-classifications-income-level-fy24> (accessed February 15, 2024)
- iii Alam, T. and Evans, L. (2022): Climate Change Adaptation in the GCC: Implementation Gaps, in: Al-Sarihi, A. (ed.), COP 27 and Climate Action in the Middle East, National University of Singapur and Middle East Institute, p. 11–26
- iv ASU (n.d.): WMO Region II (Asia): Highest Temperature, <https://wmo.asu.edu/content/asia-highest-temperature> (accessed February 22, 2024)
- v Al-Sarihi, A. (2023): Managing Climate Change in the Gulf: Challenges, Policies, and the Way Forward, EPC, [https://epc.ae/en/details/featured/managing-climate-change-in-the-gulf-challenges-policies-and-the-way-forward#\\_ftn1](https://epc.ae/en/details/featured/managing-climate-change-in-the-gulf-challenges-policies-and-the-way-forward#_ftn1) (accessed February 14, 2024)
- vi Max-Planck-Institut für Chemie (2022): Overall warming of up to 5°C in this century projected for the Eastern Mediterranean and Middle East, Phys.org, September 6, 2022, <https://phys.org/news/2022-09-5c-century-eastern-mediterranean-middle.html> (accessed February 21, 2024)
- vii Azour, J., Duenwald, C. (2022): Without Adaptation, Middle East and Central Asia Face Crippling Climate Losses, IMF Blog, March 30, 2020, <https://www.imf.org/en/Blogs/Articles/2022/03/30/blog-without-adaptation-middle-east-and-central-asia-face-crippling-climate-losses> (accessed February 21, 2024).
- viii Pal, J., Eltahir, E. (2016): Future temperature in southwest Asia projected to exceed a threshold for human adaptability. *Nature Clim Change* 6, 197–200
- ix Kuzma, S., Saccoccia, L. and Chertock, M. (2023): 25 Countries, Housing One-quarter of the Population, Face Extremely High Water Stress, World Resources Institute, <https://www.wri.org/insights/highest-water-stressed-countries> (accessed February 13, 2024)
- x Karanisa, T. Amato, A., Richer, R., Abdul, S., Skelhorn, C., and Sayadi, S. (2021): Agricultural Production in Qatar's Hot Arid Climate, *Sustainability* (13), p.2–25
- xi Siddiqui, S. (2022): A transboundary threat: The prevalence of sandstorms in the GCC pose a severe climate risk, *The New Arab*, July 18, 2022, <https://www.newarab.com/features/prevalence-sandstorms-gcc-pose-severe-climate-threat> (accessed February 13, 2024)
- xii The ND-GAIN Index, developed by the French University of Notre Dame, provides a tool to understand the vulnerability to climate change of countries (first step in the APC). This index measures a country's current vulnerability to climate change and its readiness for adaptation action. With a comprehensive scoring and ranking of 185 countries based on 36 indicators to evaluate a country's exposure, sensitivity, and adaptive capacity to climate change's negative effects through six so-called 'life-supporting' sectors (food, water, health, ecosystem services, human habitat, and infrastructure, the ND-GAIN Index enables benchmarking and comparison of countries. Readiness refers to a country's capability to use public and private sector investments effectively for adaptation and evaluated through 9 indicators in 3 categories (i) economic readiness focuses on the investment climate for mobilising capital (ii) governance readiness which addressed on institutional stability and service responsiveness, and (iii) social readiness on societal conditions that optimise investment use. While the index provides valuable insights into countries' vulnerability to climate change risks and preparedness for climate change adaptation based on, the authors acknowledge that it may condense multifaceted information into a single numerical value that may not fully capture the nuanced complexities of climate vulnerability in the Gulf context especially as climate change evolves. As such, vulnerability and impact assessments at a country level provide a better picture of the local contexts. Nevertheless, it provides a useful tool to compare the Gulf countries.
- xiii University of Notre Dame (n.d.): The ND-GAIN Matrix, <https://gain.nd.edu/our-work/country-index/matrix/#:~:text=The%20ND%20GAIN%20Matrix%20illustrates,axis%20shows%20the%20readiness%20score> (accessed February 14, 2024)
- xiv Chen, C., Noble, I., Hellmann, J., Coffee, J., Murillo, M. and Chawla, N. (2023): Country Index Technical Report, Notre Dame Global Adaptation Initiative (ND-GAIN), University of Notre Dame.
- xv See 16
- xvi IPCC (2022): Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge and New York.
- xvii UNFCCC (2023): Monitoring and evaluation of adaptation at the national and subnational levels, technical paper by the Adaptation Committee, [https://unfccc.int/sites/default/files/resource/AC\\_TechnicalPaper\\_AdaptationMandE\\_2023.pdf](https://unfccc.int/sites/default/files/resource/AC_TechnicalPaper_AdaptationMandE_2023.pdf) (accessed February 13, 2024)
- xviii UNFCCC (n.d.): Introduction: Adaptation and resilience, <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction> (accessed February 13, 2024)
- xix Supreme Council for Environment Kingdom of Bahrain (2021): Nationally Determined Contribution of Kingdom of Bahrain under UNFCCC, <https://unfccc.int/>

[sites/default/files/NDC/2022-06/NDC%20of%20the%20Kingdom%20of%20Bahrain%20under%20UNFCCC.pdf](#) (accessed February 14, 2024)

xxv Environment Public Authority Kuwait (2019): Kuwait National Adaptation Plan 2019–2030, <https://unfccc.int/sites/default/files/resource/Kuwait-NAP-2019-2030.pdf> (accessed February 14, 2024)

xxvi The Sultanate of Oman (2023): First Update of the second Nationally Determined Contribution, <https://unfccc.int/sites/default/files/NDC/2023-11/Oman%201st%20Update%20of%20the%202nd%20NDC%20-%20Optimized%20Size%20%281%29.pdf> (accessed February 14, 2024)

xxvii GCF (n.d.): Oman, <https://www.greenclimate.fund/countries/oman> (accessed February 21, 2024)

xxviii World Bank (n.d.): GDP per capita (current US\$), [https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?most\\_recent\\_value\\_desc=true](https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?most_recent_value_desc=true) (accessed February 14, 2024)

xxix Ricardo (2022), Qatar national climate change vulnerability and impact assessment, <https://www.ricardo.com/en/case-studies/qatar-national-climate-change-vulnerability-and-impact-assessment> (accessed February 20, 2024)

xxx UAE Ministry of Climate Change and Environment (2017): National Climate Change Plan of the United Arab Emirates, <https://www.moccae.gov.ae/assets/30e58e2e/national-climate-change-plan-for-the-united-arab-emirates-2017-2050.aspx> (accessed February 14, 2024)

xxxi Ameur, F. (2016) : Floods in Jeddah, Saudi Arabia: Unusual Phenomenon and Huge Losses, [https://www.e3s-conferences.org/articles/e3sconf/pdf/2016/02/e3sconf\\_flood2016\\_04019.pdf](https://www.e3s-conferences.org/articles/e3sconf/pdf/2016/02/e3sconf_flood2016_04019.pdf) (accessed February 23, 2024); Middle East Eye (2022): Saudi Arabia: Heavy rain floods Jeddah for second time in weeks, <https://www.middleeasteye.net/news/saudi-arabia-jeddah-flood-second-time-weeks> (accessed February 23, 2024);

xxxii Kingdom of Saudi Arabia (2021): Updated First Nationally Determined Contribution, <https://unfccc.int/sites/default/files/resource/202203111154---KSA%20NDC%202021.pdf> (accessed February 14, 2024)

xxxiii With a country ranked '1' being the most vulnerable

xxxiv UAE Ministry of Climate Change and Environment (2023): Accelerating Action Towards a Green, Inclusive and Resilient Economy: Third Update of Second Nationally Determined Contribution for the UAE, [https://unfccc.int/sites/default/files/NDC/2023-07/Third%20Update%20of%20Second%20NDC%20for%20the%20UAE\\_v15.pdf](https://unfccc.int/sites/default/files/NDC/2023-07/Third%20Update%20of%20Second%20NDC%20for%20the%20UAE_v15.pdf) (accessed February 14, 2024)

xxxv UAE Ministry of Climate Change and Environment (2017): National Climate Change Plan of the United Arab Emirates, <https://www.moccae.gov.ae/assets/30e58e2e/national-climate-change-plan-for-the-united-arab-emirates-2017-2050.aspx> (accessed February 14, 2024)

xxxvi UAE Ministry of Climate Change and Environment (2023): National Adaptation Plan Roadmap for the United Arab Emirates, [https://www.moccae.gov.ae/assets/download/e6100ac6/NAP%20Roadmap%20for%20the%20UAE\\_Updated%20Acknowledgments\\_05122023.pdf.aspx](https://www.moccae.gov.ae/assets/download/e6100ac6/NAP%20Roadmap%20for%20the%20UAE_Updated%20Acknowledgments_05122023.pdf.aspx) (accessed February 19, 2024)

xxxvii GCF (n.d.): Bahrain, <https://www.greenclimate.fund/countries/bahrain> (accessed February 21, 2024)

xxxviii AF (2021): Qatar Announces Pledge to Adaptation Fund, Marking First Non-Annex I Party to Contribute to Fund, <https://www.adaptation-fund.org/qatar-announces-pledge-to-adaptation-fund-marking-first-non-annex-i-party-to-contribute-to-fund/> (accessed February 14, 2024)

xxxix Alterra (n.d.): Financing the New Climate Economy, <https://www.alterra.ae/> (accessed February 21, 2024)

xl UAE Ministry of Climate Change and Environment (2019): UAE Climate Risk Assessment & Adaptation Measures in Key Sectors, <https://gggi.org/wp-content/uploads/2019/03/uae-climate-risk-assessment-and-adaptation-measures-in-key-sectors.pdf> (accessed February 19, 2024)

xli UAE Ministry of Climate Change and Environment (n.d.): A National Climate Change program that seeks to make the UAE one of the most climate-resilient countries in the world, <https://moccae-national-climate-change-adaptation-program-fcsa.hub.arcgis.com/> (accessed February 19, 2024)

xlvi UAE Ministry of Climate Change and Environment (2019): UAE Climate Risk Assessment & Adaptation Measures in Key Sectors, <https://gggi.org/wp-content/uploads/2019/03/uae-climate-risk-assessment-and-adaptation-measures-in-key-sectors.pdf> (accessed February 19, 2024)

xlvii UAE Ministry of Climate Change and Environment (2023): Accelerating Action: Towards a Green, Inclusive, and Resilient Economy – Third Update of Second Nationally Determined Contribution for the UAE, [https://unfccc.int/sites/default/files/NDC/2023-07/Third%20Update%20of%20Second%20NDC%20for%20the%20UAE\\_v15.pdf](https://unfccc.int/sites/default/files/NDC/2023-07/Third%20Update%20of%20Second%20NDC%20for%20the%20UAE_v15.pdf) (accessed February 14, 2024)

xlviii Government of Dubai (2023): Climate change: Dubai climate change adaptation strategy, [https://dubaiaenvironment.dm.gov.ae/climate\\_change](https://dubaiaenvironment.dm.gov.ae/climate_change) (accessed February 19, 2024)

xlix Thomson, S. (2023): Bangladesh is a world leader in climate change adaptation. This is how it did it, <https://gca.org/bangladesh-is-a-world-leader-in-climate-change-adaptation-this-is-how-it-did-it/> (accessed February 19, 2024)

l Ministry of Environment, Forests and Climate Change of Bangladesh (2022). National Adaptation Plan of Bangladesh, [https://moef.portal.gov.bd/sites/default/files/files/moef.portal.gov.bd/npfblock/903c6d55\\_3fa3\\_4d24\\_a4e1\\_0611ea3cb69/National%20Adaptation%20Plan%20](https://moef.portal.gov.bd/sites/default/files/files/moef.portal.gov.bd/npfblock/903c6d55_3fa3_4d24_a4e1_0611ea3cb69/National%20Adaptation%20Plan%20)



[of%20Bangladesh%20%282023-2050%29%20%281%29.pdf](#) (accessed February 19, 2024)

xlvi The World Bank (2022): Key Highlights: Country Climate and Development Report for Bangladesh, <https://www.worldbank.org/en/news/feature/2022/10/31/key-highlights-country-climate-and-development-report-for-bangladesh>, (accessed February 19, 2024)

xlvi General Economics Division (GED) (2018): Bangladesh Delta Plan 2100 Bangladesh in the 21st Century, [https://plancomm.portal.gov.bd/sites/default/files/files/plancomm.portal.gov.bd/files/dc5b06a1\\_3a45\\_4ec7\\_951e\\_a9feac1ef783/BDP%202100%20Abridged%20Version%20English.pdf](https://plancomm.portal.gov.bd/sites/default/files/files/plancomm.portal.gov.bd/files/dc5b06a1_3a45_4ec7_951e_a9feac1ef783/BDP%202100%20Abridged%20Version%20English.pdf) (accessed February 19, 2024)

xlvii Pakulski, I., Laroche, V., Kazi, S., Shawky, A., Khaleduzzaman, A., Urrutia, I., van Ledden, M., Browder, G. and Engle, N. (2021): The Bangladesh Delta: A Lighthouse Case Study, International Bank for Reconstruction and Development and The World Bank, (accessed February 21, 2024) <https://documents1.worldbank.org/curated/en/978521611557489507/pdf/The-Bangladesh-Delta-A-Lighthouse-Case-Study.pdf>

xlviii Roome J. (2021): Implementing Bangladesh Delta Plan 2100: Key to boost economic growth, World Bank Blogs, June 9, 2021, <https://blogs.worldbank.org/endpovertyinsouthasia/implementing-bangladesh-delta-plan-2100-key-boost-economic-growth> (accessed February 21, 2024)

xlix PKSf (n.d.): Bangladesh Climate Change Trust Fund (BCCTF), <https://pksf.org.bd/projects/bcctf/#:~:text=Recognizing%20the%20uncertainties%20and%20inadequacies,mandate%20by%20the%20Climate%20Change> (accessed February 21, 2024)

l PKSF (n.d.): People's Republic of Bangladesh, <https://www.greenclimate.fund/countries/bangladesh> (accessed February 21, 2024)

lvi International Monetary Fund (2023): Bangladesh and its Partners are Launching the Bangladesh Climate and Development Platform to Leverage Adaptation and Mitigation Investments, Press Release No. 23/420, <https://www.imf.org/en/News/Articles/2023/12/03/bangladesh-launch-climate-development-platform-to-leverage-adaptation-and-mitigation-investments> (accessed February 19, 2024)

lvii Kelman, I.; Ahmed, B. (2020): Analysis: Bangladesh has saved thousands of lives from a devastating cyclone – here's how, <https://www.ucl.ac.uk/news/2020/jun/analysis-bangladesh-has-saved-thousands-lives-devastating-cyclone-heres-how> (accessed February 23, 2024)

lviii UNEP (2024): Mainstreaming adaptation, <https://www.adaptation-undp.org/mainstreaming-adaptation> (accessed February 20, 2024)

lix Arkorful, V. E., Lugu, B. K., Hammond, A. and Basiru, I. (2021): Decentralization and citizens' participation in local governance: does trust and transparency matter?—An empirical study, in: Forum for development studies, p. 199–223

lvi UNEP (2023): Adaptation Gap report, <https://www.unep.org/resources/adaptation-gap-report-2023> (accessed February 22, 2024)

lvii Price, R. (2021): Climate adaptation: lessons and insights for governance, budgeting, and accountability, in: K4D Helpdesk Report 1073, Institute of Development Studies

lviii IISD (2024): Innovative Financial Instruments for Climate Adaptation, <https://www.iisd.org/innovative-financing/> (accessed February 20, 2024)

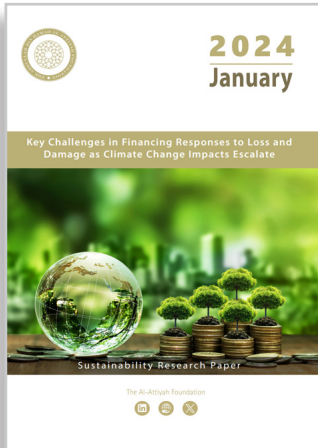
lix EEA (2018): Cooperation is key to improve climate change adaptation across Europe's border regions, <https://www.eea.europa.eu/highlights/cooperation-is-key-to-improve> (accessed February 20, 2024)

lvi Panke, D., Lang, S. and Wiedemann, A. (2015): Regional actors in the United Nations: exploring the regionalization of international negotiations, in: Global Affairs, p. 431–440.

## Contributing Authors:

- Sherri Ombuya
- Katia Alarcón
- Laila Darouich
- Marjorie Ménard
- Axel Michaelowa.

Have you missed a previous issue? All past issues of the Al-Attiyah Foundation's Research Series, both Energy and Sustainability Development, can be found on the Foundation's website at [www.abhafoundation.org/publications](http://www.abhafoundation.org/publications)



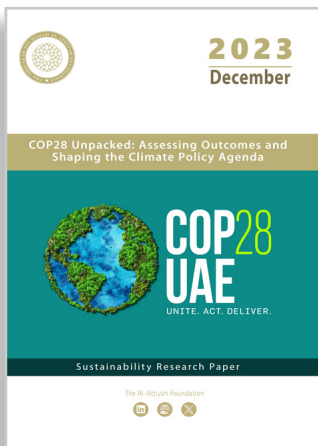
**January – 2024**

**Key Challenges in Financing Responses to Loss and Damage as Climate Change Impacts Escalate**

The 28th Conference of Parties (COP28) was a landmark event for loss and damage (L&D) negotiations, as the L&D Fund was successfully operationalised on the first day of COP28 and received initial contributions of over USD 0.7 billion.



(QR.CO.DE)



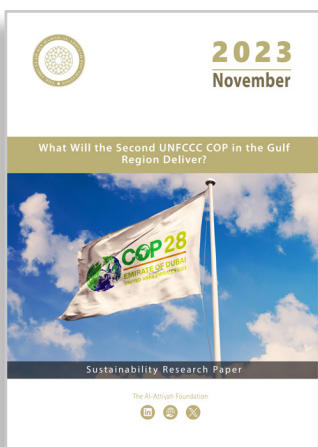
**December – 2023**

**COP28 Unpacked: Assessing Outcomes and Shaping the Climate Policy Agenda**

As a key event in the global climate calendar, the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change (UNFCCC) hosted by the United Arab Emirates (UAE) in Dubai was tasked with conducting the first official assessment of the world's progress under Paris Agreement (PA) and identifying remaining challenges.



(QR.CO.DE)



**November – 2023**

**What Will the Second UNFCCC COP in the Gulf Region Deliver?**

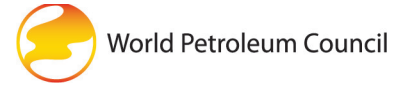
Since 1995 the Conferences of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC COPs) have provided a vital platform for addressing the manifold challenges posed by anthropogenic climate change.



(QR.CO.DE)







Our partners collaborate with The Al-Attiyah Foundation on various projects and research within the themes of energy and sustainable development.





## The Al-Attiyah Foundation

 Tel: +(974) 4042 8000,  
Fax: +(974) 4042 8099  
 [www.abhafoundation.org](http://www.abhafoundation.org)

 Barzan Tower, 4th Floor,  
West Bay.  
 PO Box 1916 Doha, Qatar

 [AlAttiyahFndn](#)  
 [The Al-Attiyah Foundation](#)  
 [Al-Attiyah Foundation](#)