Arab Reform Initiative

The Main hall for the 4th Environmental Politics Conference meeting
"Civil Society Organizations and Just Transition in the Middle East and North Africa: Challenges and Opportunities"

PROCEEDINGS FROM THE
4TH ENVIRONMENTAL POLITICS CONFERENCE - MAY 2023

CIVIL SOCIETY ORGANIZATIONS AND JUST TRANSITION IN THE MIDDLE EAST AND NORTH AFRICA: CHALLENGES AND OPPORTUNITIES

JUST TRANSITION GREEN BRIDGE

TOGETHER TOWARDS AN INCLUSIVE AND EGALITARIAN ENVIRONMENTAL TRANSITION IN THE MENA REGION

Civil Society Facility for the Mediterranean
فرفق المجتمع المدني لمنطقة المتوسط
Funded by the European Union
السويد Sverige
Arab Reform Initiative
المعهد المغربي لتحليل السياسات
MOROCCAN INSTITUTE FOR POLICY ANALYSIS
ALTERNATIVE POLICY SOLUTIONS

Contributors:

Shady Khalil

Saker el Nour

Lisa Shahin

Rayan Kassem

Imène Louati

Melissa Pawson

Samah Hadid

Mourad Zenasni

Kanj Hamade

Amine Derkaoui

Clementine Lienard

Jina Talj

Zeina Abla

Ruba Ajjour

Amjad Bani Issa

Sara Hess

Salma Kadry

Safaa Khalaf

Sahar Mohammad

MAY 2023

Table of contents

1

Introduction:

The ongoing climate, political, economic, and social crises across the Middle East and North Africa have made engaging in a collective process of transition to a more just and sustainable economic and environmental model an absolute necessity. In order to build such a future, there is a need to address key topics such as water access, food security and sovereignty, and energy transition through a multifaceted perspective combining ecological, social, economic, and political lenses. Hence the notion of "just transition", which has been taken up by some governments, civil society actors, and even some private entities, although they seldom agree on what constitutes such a transition or how it can be implemented in the Middle East and North Africa. Ongoing international events and processes have also affected perspectives on just transition, though the region and its priorities often seem marginalized in such conversations.

Our conference sought to address the questions of what exactly would constitute a just transition in the Middle East and North Africa (notably when it comes to access to food and water justice) given the myriad of challenges and the restrictive spaces for mobilization, notably for marginalized communities. In addition, it will explore who decides and sets the agenda for just transition in the region and how civil society organizations (CSOs) can mobilize and work with local communities towards the achievement of a more inclusive process. The dynamics between local and international actors will be explored, notably the question of how the international community can support environmental CSOs in developing a home-grown agenda that is responsive to local needs. Finally, the issue of reframing the narrative around the needed changes for a sustainable future in the region will be explored through the lens of strengthening collaborations with journalists to push for an increase in public awareness of those matters.

Organized by the Arab Reform Initiative, the Alternative Policy Solution at the American University of Cairo, and the Moroccan Institute for Policy Analysis and funded by the European Commission, this conference was part of the Just Transition Green Bridge project, a three-year project that aimed to empower CSOs and locally led initiatives in Tunisia, Egypt, Morocco, Lebanon, Palestine, Algeria, and Jordan. This conference hence brought together leading experts, activists, and policymakers in six panels to explore the critical issues facing the region in the context of climate change and social justice. Our diverse group of panelists discussed topics such as climate finance, the energy transition, gender and social justice, community resilience, and more. The conference was designed to foster dialogue, build partnerships, and inspire action towards a more just and sustainable future for the Middle East and North Africa.

Panel 1: What constitutes environmental justice and just transition in the Middle East and North Africa?

Decolonizing the Energy Transition in the Middle East and North Africa: From Black Gold to Green Energy

Shady Khalil, Co-Founder, Greenish and Regional Campaign Lead, Greenpeace MENA.

The MENA region, rich in energy resources, especially oil, has been a focal point for external powers for several decades. Yet, the essential transition to renewable energy sources in order to combat climate change has introduced new forms of resource domination. This continued significance of the region in the global energy matrix underscores the enduring nature of energy colonization.

Historically, Western colonial powers, primarily, the United Kingdom and France, exploited the 'brown gold' or oil resources of the MENA region.[1] The early 20th century saw foreign powers exerting significant control over these resources, often sidelining local communities and leaving behind enduring socio-economic disparities.[2] This era of 'brown gold' stands out as the initial phase of energy colonization in the MENA region, characterized by foreign domination, local disenfranchisement, and environmental degradation.

The 21st century marked a transformative period as the world began to shift its focus from 'brown gold' - fossil fuels - to renewable sources of energy. As Europe, a global forerunner in the fight against climate change, intensifies its commitment to net-zero emissions,80 72 100 17 the focus turns to renewable-rich regions like MENA for solar and wind power. While this transition might initially appear progressive, it may also set the stage for a new form of colonization. The drive towards renewable energy has seen European corporations extending their reach into the MENA region, an intervention that risks repeating past patterns. The extraction and control of renewable resources in the pursuit of a greener future could inadvertently replicate colonial dynamics, giving rise to a new form of corporate colonization, or what could be dubbed as 'green colonialism'. Hence, as we navigate this transition, it's imperative to ensure that the energy shift does not become a mask for the new age of colonialism.

Desertec Industrial Initiative: Energy Colonialism

The Desertec Industrial Initiative (Dii), initiated in 2009, manifests the revitalized attention of foreign entities in the MENA region's energy

1 Timothy Mitchell, Carbon Democracy: Political Power in the Age of Oil, Verso Books, 2011.

2 Adam Hanieh, Money, Markets, and Monarchies: The Gulf Cooperation Council and the Political Economy of the Contemporary Middle East, Cambridge University Press, 2016.

sector, notably steered by German companies.[3] The central tenet of Desertec was to leverage the region's vast solar and wind resources, primarily exporting the generated energy to Europe while allocating a portion for local usage. The project envisaged supplying up to 15% of Europe's electricity needs by 2050. [4]

Despite its potential for advancing green energy in the MENA, the Desertec project has been subject to severe criticism due to its anticipated large-scale impacts on desert ecosystems, local communities, and the risk of perpetuating historically unequal power dynamics.[5]

Significant apprehension surrounded the project's potential ecological footprint. The establishment of extensive solar and wind farms might disturb fragile desert ecosystems, thereby threatening local flora and fauna.[6] In addition, infrastructure development could disrupt traditional nomadic paths, consequently impacting the lives of indigenous communities.[7]

The question of benefit distribution also raises eyebrows. The green energy yielded by Desertec was primarily earmarked for export to Europe, thus potentially reinstating the MENA region's role as an energy resource provider for the Global North.[8] This could potentially underscore a pattern reminiscent of colonial resource extraction, with benefits disproportionately falling into the hands of foreign companies and governments, while local communities bear the environmental and social burdens.[9]

The project's governance structure also highlighted an imbalance of power. The consortium was chiefly composed of European companies, calling into question the extent of local involvement and control over the project.[10] This dominance by entities from the Global North potentially lends the project a neo-colonial character, underlining the necessity for a decolonized approach towards a just energy transition. To genuinely actualize a 'just' transition, local communities should be engaged in decision-making processes, and the rewards of renewable energy projects must be distributed equitably.[11]

Case Study: Decolonizing Energy Farms in Oman

The concept of decolonizing energy transitions entails the crucial need to disrupt long-standing power imbalances, validate the sovereignty of indigenous communities, and recognize and respect local wisdom.[12] This approach necessitates the crafting of solutions that reflect local cultural values and address

3 Gerhard Knies, ed. Clean Power from Deserts: The DESERTEC Concept for Energy, Water, and Climate Security, Trans Mediteranean Energy Cooperation, 2009.

4 Desertec Foundation, "Whitebook: Clean Power from Deserts" 2012 available at http://www.theconsultingsociety.com/uploads/6/7/2/0/6720063/01_desertec_foundation_en_2012-09-16.pdf

5 Franz Trieb, "Desert power: getting started. DLR Deutsches" Zentrum für Luft und Raumfahrt, 2012

6 Ibid

7 Lucas, "The renewable energy landscape in the Arab region: A critical analysis" Renewable Energy Law and Policy Review, 2014

8 Martin Hvidt, "Economic diversification in GCC countries: Past record and future trends. Kuwait Programme on Development, Governance and Globalisation in the Gulf States", LSE Press, 2013

9 Ibid

10 Holger Stritzel, "Toward a Theory of Securitization: Copenhagen and Beyond". European Journal of International Relations, Vol. 13, No. 3, 2007

11 Lucas, "The renewable energy landscape in the Arab region: A critical analysis" Renewable Energy Law and Policy Review, 2014
Franz Trieb, et al, "Desert power: getting started. DLR Deutsches" Zentrum für Luft und Raumfahrt, 2012

12 Kyle Whyte,"Indigenous science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change crises", Environment and Planning E: Nature and Space, Vol 1, 2018

13 Arturo Escobar, Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds, Duke University Press, 2018.

14 Hanne Svarstad, Tor Benjaminsen, Overå, R, "Power theories in political ecology", University of Arizona Libraries, Vol. 25, Iss. 1 2018

15 CDP Carbon Majors Report 2017, link: https://cdn.cdp.net/cdp-production/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1501833772

16 Hickel, Jason. "Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary." The Lancet Planetary Health 4.9 (2020): e399-e404.

the context-specific challenges, thereby questioning the uniform approach often propagated by the Western model[13]. Moreover, the spirit of decolonization emphasizes the active participation of local communities in decision-making processes, thereby fostering a sense of autonomy and empowering these communities to define and shape their sustainable future trajectories.[14]

To comprehend the practical application of this transformative approach, one may delve into the case of Oman, where community-owned wind farms have come to the fore, serving as a remarkable instance of the decolonized approach to just energy transition. Traditionally, foreign corporations held the reins of the renewable energy sector in Oman, often sidelining the local communities. However, a transformative shift has recently been witnessed, where the reins have been passed to the local communities in the form of ownership of wind farms.[15]

This shift towards community-owned wind farms has sparked a wave of local economic growth and social empowerment, in addition to contributing towards meeting Oman's renewable energy targets. The incorporation of community participation in decision-making processes ensures the cultural sensitivity of these wind farms, thereby fostering a sense of ownership and autonomy within the local communities. Moreover, these initiatives facilitate the transfer of knowledge and skill-building, thereby preparing local communities for potential opportunities in the renewable energy domain.[16]

Conclusion

Facilitating a truly decolonized and equitable energy transition calls for a profound systemic change that cuts to the very roots of our energy systems. This deep-seated transformation necessitates a holistic, coordinated effort that transcends national borders, policy circles, and cultural divides. Key elements of this systematic shift include the recentering of marginalized voices in decision-making processes, fostering cultural respect and inclusivity, and revaluing indigenous wisdom as an integral part of sustainable solutions.

Moreover, it requires a renewed understanding of wealth and power, shifting away from an extraction-based economy towards an equitable sharing of benefits. It also means building infrastructures that are attuned to local needs and environmental sensitivities rather than imposing monolithic solutions. By doing so, we ensure that our pursuit of renewable energy neither becomes an extension of old colonial patterns nor births a new form of green colonialism.

The transformational story of community-owned wind farms in Oman is not just an isolated success, but a vibrant testament to the practicability and multifaceted advantages of a decolonized approach to a just energy transition. This innovative approach does not merely promise economic viability; it also illuminates a path to significant social empowerment, environmental conservation, and the revalorization of indigenous knowledge.

In this grand endeavor, every stakeholder has a role to play – from policy-makers and international actors to local communities themselves. Each contribution, each step towards this systematic shift, brings us closer to an energy future that is not only sustainable and inclusive, but that also upholds justice and equity at its core. It is a future that does not merely pay lip service to decolonization but embodies it in its processes, its benefits, and its very foundations.

References

- Al-Badi, A. (2017). Renewable energy in Oman: Status and future prospects. Renewable and Sustainable En-ergy Reviews, 78, 640-650.
- Al-Badi, A. H. (2017). "Community-Owned Wind Farms in Oman: A New Approach towards Energy Transition." Renewable and Sustainable Energy Reviews, 75, 865-876.
- Dii Desert Energy. (2009). Clean Power from Deserts: The DESERTEC Concept for Energy, Water, and Climate Security.
- Desertec Foundation. (2012). Whitebook: Clean Power from Deserts.
- Escobar, A. (2015). "Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds." Duke University Press.
- Escobar, A. (2015). Territories of Difference: Place, Movements, Life, Redes. Duke University Press.
- Hanieh, A. (2016). Money, Markets, and Monarchies: The Gulf Cooperation Council and the Political Economy of the Contemporary Middle East. Cambridge University Press.
- Hvidt, M. (2013). Economic diversification in GCC countries: Past record and future trends. Kuwait Programme on Development, Governance and Globalisation in the Gulf States.
- Lucas, C. (2014). The renewable energy landscape in the Arab region: A critical analysis. Renewable Energy Law and Policy Review.
- Mitchell, T. (2011). Carbon democracy: Political power in the age of oil. Verso Books.
- Stritzel, H. (2012). Toward a Theory of Securitization: Copenhagen and Beyond. European Journal of International Relations.
- Svarstad, H., Benjaminsen, T. A., Overå, R. (2018). Power theories in political ecology. University of Arizona Libraries. 1(1):1-18.
- Trieb, F., et al. (2012). Desert power: getting started. DLR Deutsches Zentrum für Luft und Raumfahrt.
- Trieb, F., Schillings, C., Pregger, T., & O'Sullivan, M. (2012). Solar electricity imports from the Middle East and North Africa to Europe. Energy Policy, 42, 341-353.
- Whyte, K. (2018). "Indigenous Science (Technology) for Transforming Resilience." Resilience in Ecology and Urban Design, 287-303.
- Whyte, K. P. (2018). Indigenous science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change crises. Environment and Planning E: Nature and Space, 1(1-2), 224-242.
- World Bank. (2019). MENA Economic Update: Reaching New Heights: Promoting Fair Competition in the Middle East and North Africa. World Bank.
- World Bank. (2020). "Promoting Renewable Energy in Oman: Opportunities and Challenges." World Bank Publications.
- World Bank. (2020). Oman: An Economic and Distributional Impact Assessment of the National Subsidy Reform Program. The World Bank Group.

Environmental Justice and Just Climate Transition in the Arab world

Saker El Nour, sociologist and independent consultant, co-founder of RÉSEAU-TANMO.

We are currently living in an era where capitalist civilization is the primary driving force behind significant changes in the systems of our planet. Capitalism has caused severe breaches in the Earth's capabilities and disruptions in climate and ecology, posing a serious threat to life on our planet. Some scholars, such as Jason Moore, refer to this era as the "Capitalocene," emphasizing that it is capitalism as a dominant system, rather than humanity as a whole, that is responsible for the current environmental crisis. Capitalism, according to this perspective, governs power relations, accumulation, and reproduction within the global ecosystem. It relies on continuous expansion, relentless accumulation, and limitless growth, often at the expense of human and non-human energies, resulting in exploitation, depletion, and hierarchy within the planet's web of life.

While our concerns about the accelerating climate change and environmental degradation are well-founded, it's crucial not to lose sight of the root causes of this ecological imbalance. Contrary to simplistic narratives that blame overpopulation for the crisis, accumulated knowledge shows that the primary responsibility lies with the structure of the capitalist system. For instance, the Climate Accountability Institute's report highlights that just 100 global companies are responsible for over 70% of the world's greenhouse gas emissions. Similarly, studies like the one conducted by Jason Hickel demonstrate that historically, the United States alone has been responsible for 40% of excess global carbon dioxide emissions, with the Global North collectively responsible for at least 92% of these emissions. Therefore, addressing historical responsibility entails compensating for the damages caused by disrupting the planet's equilibrium. This is not an act of charity but a fundamental aspect of procedural justice, in line with longstanding practices among indigenous peoples and local communities.

While the crisis is accelerating, we are witnessing a surge in discussions, activities, and movements advocating for an alternative system of production and consumption that challenges the dominant paradigm responsible for alienating humanity from nature. This alienation has led to a rupture in the reciprocal relationship between humans and their environment, hindering the sustainability and renewal of both natural environments and human societies.

The concept of environmental justice centers on the equitable distribution of environmental burdens and benefits, and advocates for inclusive participation in environmental decision-making. It addresses the lack of fairness and equality in access to natural resources, as well as the uneven distribution of the benefits from these resources, such as land, water, pastures, and fisheries, among diverse population groups. Environmental justice also seeks to rectify disparities in environmental burdens borne by different social sectors due to issues and crises related to natural resources. It underscores the importance of involving socially, politically, geographically, and ethnically marginalized groups in environmental decision-making

while protecting them from the unequal risks and burdens associated with environmental crises. Environmental movements, rooted in these principles, have played a significant role in pushing for environmental justice and a just transition in both local and global public discourse, confronting various forms of discrimination and the absence of environmental justice.

In the Arab context, manifestations of environmental justice, or the lack thereof, are evident in various tangible forms, such as access to clean water, healthy food, pollution-free air, and uncontaminated soil. One striking example of environmental injustice in the Arab world pertains to small farmers who face inequities, with water and land resources often favoring large local and international investors and export-oriented farms targeting European markets. Women, in particular, frequently labor under challenging conditions in this exploitative context.[1]

These practices starkly contradict the principles of environmental justice, which demand fair treatment and meaningful participation for all individuals regardless of their race, color, national origin, income, geographic location, or social class. It is essential to approach the concept of social justice while considering these intersections, not only on a global scale (Global North-South dynamics) but also at the local level (geographical location, gender, social class) within the framework of local and international power dynamics. Environmental justice should not be seen as a substitute for social justice. If there are efforts that narrowly frame the issue of environmental justice and attempt to isolate environmental concerns from the broader social, cultural, economic, and global context, then one of the roles of the environmental movement is to establish frameworks that involve a comprehensive understanding of environmental justice, including issues related to distributive justice, cultural recognition, gender, and procedural justice.

Transitioning toward a just future, or "just transition," in the Arab region can be seen as a multidimensional approach that interconnects social, economic, political, and environmental dimensions. It spans from local communities to national states, and extends to the global level. Such an approach invites critical discussions about democracy, human rights, the rights of nature, gender equality, social class, and various forms of anti-neocolonialism in the context of transitioning toward a low-carbon alternative to our existing systems. At its core, a just transition entails envisioning a new relationship and an alternative vision, not only in our environmental interactions but also in our societies, economies, and modes of production and consumption. It necessitates collective efforts from civil organizations, governments, communities, and individuals to build a future that is not only sustainable but also regenerative and equitable.

Within the context of the agriculture sector in North Africa, a just transition involves promoting sustainable practices that address environmental challenges while supporting the livelihoods of small-scale farmers and peasants through the development of public

1 Saker El Nour, "The Dam, Rice, and State: Environmental Bigotry Towards Farmers of the Delta" (Arabic), Al-Manassa, 5 March 2018, link: https://almanassa.com/stories/2850

2 Saker El Nour, "Towards a Just Transition to Agriculture in North Africa" (Arabic), Food Sovereignty Network and the Transnational Institute, 2021, link: https://www.tni.org/ar/node/160

3 Ulrich Brand and Markus Wissen, The Imperialist Way of Life: Exploitation of Man and Nature in Global Capitalism, Centre for Arab Unity Studies, Beirut, 2023.

4 Diab, Osama. "Africa's unequal balance." Review of African Political Economy (2023): 1-9.

5 Schultz, Nikolaj. "New climate, new class struggles." Critical zones: The science and politics of landing on earth (2020): 308-311

policies. Research into the potential for a just transition in North African agriculture has highlighted the significance of local knowledge and agroecological practices in addressing environmental crises.[2] Comparative assessments of shifts in agricultural policies in Algeria, Egypt, Morocco, and Tunisia have confirmed the potential for agroecology and the development of local practices as tools for advancing a just and sustainable transition in the agricultural sector in North Africa.

Emphasizing the role of food sovereignty in achieving a just transition is essential. Food sovereignty extends beyond the concept of food security; it encompasses people's rights to access healthy and culturally appropriate food produced through agroecological methods. It also entails their right to determine their own food and agricultural systems. In the MENA region, where food imports, water scarcity, and agricultural challenges related to climate change are severe issues, the concept and policies of food sovereignty become critical for ensuring a just and sustainable agricultural transition.

It is crucial to confront the challenges that hinder our ability to shape the agenda for a just transition locally and in the Arab world, particularly when analyzing the green initiatives of major entities like the European Union and the United States. While their aspirations for a greener future are noteworthy, it is essential to highlight the connection between these green deals in the Global North and the burden they place on the Global South. This burden often involves transforming the Global South into a hub for polluting industries and exporting their pollution, as well as using it as a source for importing clean energy. Furthermore, extractive practices that deplete the resources and energies of the Global South continue. This pattern essentially turns our countries into promoters of an "imperialist way of life."[3] It presents a false facade of environmental concern in the North while perpetuating the South's dependency and maintaining environmentally and economically unequal exchanges between our countries and the Global North.[4] Advocating for a genuinely just global transition is imperative, one that leaves no one behind, ensures an equitable distribution of resources and responsibilities, and acknowledges historical responsibilities while addressing local disparities and injustices.

Exceptionalism is a frequently employed approach in addressing Arab issues in many international discussions and literature. This approach needs to be comprehensively challenged, especially when addressing environmental concerns and the social-environmental movement. The environmental crisis we face extends beyond the boundaries of nation-states and geographical regions, and addressing it requires connecting local, regional, and global struggles through new organizational approaches.

These organizations should trace back to the origins of the concepts we are discussing, such as climate justice and just transition. These concepts have emerged from the struggles of marginalized and excluded groups to prevent them from being co-opted, removed from their context, and turned into tools for reproducing the capitalist system responsible for the crisis, albeit under a false green facade. Therefore, environmental struggles need to be organized in innovative ways that protect the integrity of these concepts and their commitment to justice.

As suggested by Nicolaj Schultz,[5] a shift in

power relations necessitates that the global environmental movement adopts a class-based approach to organizing its struggle and movement. However, this should not entail replicating the old model of class struggle, which, despite mitigating some of capitalism's harshness, failed to undermine it. Instead, it should involve an ecological and social class logic that generates a radical and global position of struggle, placing the marginalized and vulnerable groups at the center of local, national, and global efforts.

Climate Colonialism: Re-Assessing North-South Responsibility

Lisa Shahin, Advocacy and Research Coordinator, the Arab Group for the Protection of Nature.

We all acknowledge the right of each individual to live in a safe and clean environment that serves their health and well-being. However, the harsh reality reveals that marginalized communities often bear the unjust burden of environmental pollution, and the consequences of climate change. Their actual contribution to these adverse changes is disproportionate to the effects they endure.

Emphasizing environmental justice extends beyond involving marginalized communities in decision-making processes and environmental policy implementation. It also entails ensuring that these communities possess the right to formulate their short-term and long-term plans, implementation strategies, and priorities in alignment with their economic, political, and social realities. Furthermore, it is imperative to establish the sovereignty of these communities over their natural resources, granting them the authority to manage and conserve these resources in a manner that genuinely promotes sustainable development.

Regarding climate justice, a form of climate colonialism persists by disregarding the disparities in responsibility between countries of the Global North, which are significant contributors to climate change, and those of the Global South which bear the brunt of its impacts. What is necessary is the mitigation of climate change and the compensation of vulnerable countries for the damages they suffer. Global North countries, which are responsible for 50% of all carbon emissions since the industrial revolution, contrast with the Arab region's contribution of less than 5%. Yet, Arab countries are among the most fragile and least resilient to climate change globally.

While the concept of a just transition is theoretically sound, it necessitates a localized interpretation at the regional level. Priorities in Northern countries differ from those in Arab countries, with wars and internal conflicts in the latter posing significant obstacles to establishing the foundations of sustainability.

Global North countries and international donors are developing just transition strategies, including aid and financing structures, and execute projects under the guise of development. However, these efforts perpetuate colonialism by settling their "climate debts" at the expense of less developed countries, often excluding local communities from reaping genuine benefits from these projects. It is crucial to be cautious of the unfair and misleading application of the just climate transition. Some strategies currently in place, such as carbon markets, incentive programs, and "smart" precision agriculture, tend to favor large corporations and can be seen as a form of

greenwashing. For instance, donors advocate for reducing the agricultural sector in Global South countries as a solution to carbon emissions, rather than addressing the issue within their own countries, particularly in sectors with the most significant climate impact, such as energy, industry, transportation, and arms production.

It is essential to broaden the perspective beyond carbon emissions and consider the broader environmental picture, including the human element and its rights, which also require protection. Implementing a just and sound transition on the ground faces challenges such as discretionary implementation, a lack of accountability and monitoring, and limited participation among relevant stakeholders necessary for its success.

In the Arab region, root causes that render societies vulnerable to climate change often stem from prolonged wars, internal conflicts, and occupation, making adaptation to climate change more challenging. For instance, in Jordan, agricultural lands in the Jordan Valley face fires caused by the Israeli occupation, which has disrupted water sources through tactics like excessive pumping and altering the course of the Jordan River. The occupation has also polluted the southern part of the river with agricultural waste, severely affecting water sources in the country.

The Israeli population emits ten times the annual amount of carbon dioxide compared to Palestinians, yet the latter are more adversely affected. The occupation exploits the environment through an apartheid system that dispossesses Palestinians of their land, water, and other natural resources, undermines infrastructure, and obstructs the adoption of adaptive technologies, such as water management and renewable energy. Additionally, it releases dam waters, flooding Palestinian cities and uprooting millions of trees, directly impacting efforts to mitigate and adapt to climate change.

Furthermore, challenges persist in the programs of ministries, companies, and civil society organizations that act as project implementers for donors, often without accountability or established project goals and activities. This marginalizes genuine civil society organizations and fosters partnerships with various entities without clear standards or goals.

Addressing the structural and root causes of environmental fragility, particularly in areas affected by wars and occupation, is paramount. Pressure should be exerted on those responsible for causing these crises. Additionally, the impact of conflict, wars, and protracted crises must be factored into the development of a methodology for implementing a just transition—a dimension that international organizations have often overlooked in addressing our region.

It is crucial for states to have sovereignty and decision-making power when implementing just climate transition strategies, which should benefit society as a whole rather than individual interests or specific parties. Transparency and participation with local organizations and affected communities are vital to this process.

Supporting the agricultural sector and small-scale farmers is essential. This involves promoting the cultivation of crop varieties that can adapt to climate change, focusing on staple food crops like wheat, establishing strategic reserves of essential food commodities, especially grains, enhancing water management, and diversifying livelihoods. Climate colonialism can be countered through meaningful research that centers on the

priorities and aspirations of Arab civil society, drawing on Arab academic experiences and documents that prioritize the Arab perspective in analyzing and presenting facts.

Civil society organizations bear the responsibility of advocating for an effective and just transition through international and regional platforms. This advocacy aims to encourage countries and major organizations to find solutions aligned with the protection of nature. As an independent civil society organization founded in 2003, we are committed to enhancing sovereignty over food and natural resources in the Arab region, particularly in Jordan and Palestine. One of our largest initiatives involves planting fruit trees in Palestine and Jordan to empower small-scale farmers, provide them with a sustainable source of income, and mitigate desertification and the effects of climate change. To date, we have successfully planted over 2.8 million trees, benefiting approximately 250,000 individuals. We also strive to influence policies related to agriculture, the environment, and food at national, regional, and international levels. Additionally, we established the Arab Network for Food Sovereignty (ANFS), a regional network comprising more than 35 organizations in 13 Arab countries.

Climate Change Adaptation and Mitigation in the MENA Region

Rayan Kassem, Engagement Manager on Food and Agriculture Transformation, World Benchmarking Alliance.

The focus of this year's conference on what a just transition translates into in the MENA has brought together multi-stakeholders from civil society, academia, journalism, and others. With the aim to ignite a civil society-led movement, the panels focused on understanding the differences between the global climate justice movement and the regional and local justice narrative. The panels were centered around three thematic areas: water, energy, and food. The discussions opened a multitude of intertwined crises and defined the socio-political states of the region as key to the ability to act. It was noted from the beginning that climate justice in the MENA is about civil rights, economic dependencies, language barriers, knowledge possession, the divide between the global north and south, and systemic oppression.

Starting off with the first panel on what constitutes a just transition, many aspects of movement creation were discussed. It was emphasized that a climate justice movement in the MENA must have its own Arab identity and must center on its own regional priorities. Many definitions of climate justice were circulated between the panelists and the audience. There was agreement that the creation of climate justice principles (as launched by Youth4Nature in West Asia) could form a consensus on ways to move forward and declutter the barriers to act. The panel was able to conclude that although many aspects of climate justice in the MENA can be integrated, a few must be prioritized. These constitute a movement that should consist of agreed-upon principles, that is systematic, inclusive, funded, led by frontline communities, context-specific, and focused on degrowth.

Most countries in the MENA region are not able to adapt adequately to climate change, and most of its communities can be labeled as vulnerable. However, discrepancies among these communities exist and vary widely. In

identifying the most vulnerable, women in the agri-food sector were particularly noted. Interestingly, it was mentioned that women in the Jordanian agrifood sector, when asked, mentioned that gender was not the only factor in their situation. They mentioned the role of poverty and employment as principal factors. Studies presented showed that most land ownership across the region is owned by men and that cultural exclusion of women's role in society is a major factor in women's ability to adapt to climate change or to protect themselves from climate disasters. It was agreed that the most affected communities are not on the decision-making tables. The role of conflict-affected areas was also noted, as the compounding effect climate change and conflict have on migrants. Decision-makers are still asking for more evidence regarding the relationship between climate change and migration in the region. Data is scarce, and access to climate finance in conflict-affected areas is non-existent.

The role of peace and politics was central in discussions on the nexus of food-water-energy. In the energy sector, climate mitigation solar panel mega projects in Morocco and Egypt were highly criticized. Egypt and Morocco receive the highest share of climate finance in the MENA via these projects (Around 75%). In Egypt, solar energy farms are built on indigenous community lands without strong benefits to landowners, supply Egypt with more expensive energy, and bring back more funds to the funders than to the beneficiaries. The notion of Western development and aid projects in viewing Egypt and Morocco as spacious desert lands for climate mitigation projects is said to have negative consequences on local communities. In food, the difference between food security and food independence was also debated by the participants. Food independence, as defined by Layla Riahi, member of the Tunisian Platform for Alternatives and the Working Group for Food Sovereignty, refers to having farmers as a priority for the use of all resources in a just transition whereby farmers set and prioritize local food policies. Here, the role of the political interface in food production and smallholder farmers was highlighted. There were discussions regarding "seed colonization" and how local movements are mobilizing to retrieve local seeds' sovereignty. Seed colonization was noted as a common issue from trade and the food systems that were created to satisfy Western needs over local ones.

The mechanisms of climate finance in a just transition were also discussed. The lack of trust in governments and the need for civil society support indicated a priority to decentralize and diversify climate finance streams from project-centric to consumer-targeted. Facilitation of fund channeling towards conflict-affected countries was also noted as a need that would also play a role in peacebuilding. The risks posed to journalists were also discussed. Journalists have difficulty in accessing information and data and have high risks while investigating on-the-ground violations. The group did emphasize that there are alternative methods and needs that can be covered without the need for journalists to jeopardize their own safety.

The full-day closed workshop organized after the conference opened a number of key learning opportunities and reflections. Some of the main learnings acquired and agreed on by the group were the need to have data acquisition and disclosure more eminent in the MENA, more opportunities to share experiences and demonstrate leading practices, and spaces organized for collaboration that are MENA-led.

Attempts to discuss the potential of forming coalitions based on synergies identified around a just transition revealed several opportunities and challenges. On one side, they showed that stakeholders acknowledge the reliance on each other's initiatives and perspectives. On the other side, they revealed that there are barriers to overcome that might be beyond their scope of work or ability to act. Though the narrative dominant throughout the conference was clearly socio-political, which is much acknowledged, having a solution-oriented lens would have opened space for more collaboration and willingness to take action, especially with COP28 around the corner. There is a higher tendency to focus on barriers whilst in MENA settings which is not unique.

The systemic oppression, alongside the corruption and failure to see advancements in the region, has had organizations and individuals feeling a sense of despair channeled via a victim mindset. It is important to discuss and recognize the colonial efforts and political tensions that have existed when framing a just transition discussion in th e MENA. However, as non-state actors, we must possess a spirit of hope, one that intends to alleviate but also take ownership and responsibility to do what is just. As civil society organizations, it is our duty to act as stewards.

The group presented a lot of thoughts and narratives to uncover. The conference has shown the mindset and ability to frame a just transition in the MENA region. There is a sense of direction, which with alignment over principles and a definition, can pave the way towards a clear trajectory for a just transition. As a first step, there needs to be more effort put into communication among all stakeholders so that this wealth of knowledge can be built upon each experience of actors and harmonize the efforts across the region. It was a positive experience overall to witness the sense of understanding and coherence participants had toward a just transition. As a first step, we need to communicate more efficiently among ourselves and regularly meet so that we can look at the broader spectrum, align with global conversations, and set a common target to reach.

Panel 2: Environmental Justice Transition: Who are the impacted communities and who is being left out?

How Can We Avoid the Energy Transition Reinforcing Traditional Economic Structures and Inequalities?

Imen Louati, Program Manager, Rosa Luxemburg Stiftung.

The climate changes and environmental transformations unfolding in the Arab region are set to disrupt the foundational aspects of our lives, with social, economic, and ecological implications. As per the Climate Commission's findings, the Mediterranean region is anticipated to undergo a surge in extreme weather events such as forest fires and floods, along with heightened aridity and drought rates. These climate changes will predominantly impact Southern countries more severely than their Northern counterparts. Fragility characterizes ecosystems in North Africa, rendering them ill-equipped to adapt to current and to anticipated climate shifts. This fragility primarily stems from economic policies in the region centered on natural resource depletion. Reliance on resource extraction as a primary mode of development has eroded environmentally sustainable activities, compromised ecosystem adaptability, and hindered responses to climate change.

While North African countries require more attention and commitment to addressing and adapting to climate change, the prevailing environmental discourse in the Global South is shaped by entities like the World Bank, GIZ, European Union agencies, and others, which produce reports and seminars on the risks associated with rising global temperatures. These documents urge urgent action, the promotion of renewable energies, and the implementation of adaptation plans.

However, these reports and analyses tend to be technical in nature and often overlook issues of social class, justice, power dynamics, or the region's colonial history. Furthermore, they propose solutions rooted in the global energy market without delving into the root causes of ecological and climate crises.

These solutions primarily hinge on the belief that the free market can self-regulate. Despite efforts to price carbon-intensive activities, given their significant contribution to global warming and climate change, and incentives to invest in renewable energies to offset non-renewable sources, the majority of carbon emissions continue to rise twenty years after technical solutions began being proposed.

Investment in renewable energies lags behind the growing global demand for energy, with fossil fuels maintaining their dominance in the global energy landscape.

Beyond their ineffectiveness, it is crucial to highlight the negative social repercussions of these technical solutions. Transition projects from fossil fuels to renewable energies, regardless of their implementation, are often presented as means to avert climate disruption. However, these solutions frequently assume that the North African desert to be vast, uninhabited, and unused, and that renewable energy projects there will have no impact on the livelihoods of local communities. For instance, the Noor Midelt solar energy complex in Morocco is set to span over 4,000 hectares in the country's heartland for renewable electricity production. Over half of these are communal lands managed by three Amazigh agricultural communities, while the remainder is classified as forest lands, currently overseen by local groups. These lands were expropriated for the project under national laws permitting expropriation for the "public interest." Consequently, these communities found themselves without land for habitation.

Tunisia follows a similar approach. The energy transition strategy pursued by successive Tunisian governments over the past decade has often disregarded the rights of local communities, ranging from inadequate access to electricity to land confiscation, particularly affecting residents in already marginalized areas. In some instances, citizens in these areas oppose renewable energy projects, such as wind farms in Borj Essalhi in the tribal homeland. These projects have been in development for over two decades, resulting in numerous grievances among the local population. Another case in point is locals' obstruction of a solar farm in Tunisia's Gafsa state. It is one of five major projects recently announced by the Tunisian government, but its implementation is viewed by citizens as an additional source of marginalization. Beyond land and resource monopolization, local residents lack confidence that they will benefit from the revenues of the energy generated in their homesteads and their lands.

It's crucial to recognize that the communities affected by these energy projects have not merely lost their lands, where they have been farming and herding for generations. These communities have also lost their livelihoods, employment opportunities, and homes to make way for renewable energy farms. They find themselves disconnected from these projects economically, without integration or employment opportunities. Current policies in the Middle East and North Africa region often prioritize large-scale projects without adequately considering the needs of local populations and the environmental context of these projects. They also fall short in addressing the necessary conditions for economic integration.

In conclusion, solar energy, wind energy, and more recently green hydrogen are frequently presented as apolitical and purely technical solutions. They depict the Euro-Mediterranean region as a unified society grappling with climate change as a common issue, often overlooking the historical responsibilities of the industrial West and the consequences of the capitalist energy model. These transitions tend to preserve the status quo and the inherent contradictions of the global system, which underlie these climate crises.

How, then, can we avoid having the energy transition reinforce traditional economic structures and inequalities?

Addressing the global climate crisis necessitates a rapid and profound reduction in greenhouse gas emissions, coupled with a shift toward renewable energies. However, we cannot overlook the need for radical changes in our production and distribution methods, consumption patterns, and fundamental issues of social justice and equity. Otherwise, the transition will merely be a shift from fossil fuels towards other, more renewable, energy sources. Achieving such transitions demands significant public investments in renewable energy, public transportation, economic diversification away from fossil fuels, and more.

Considering the economic and political situation in the region, marked by worsening indebtedness, economic fragility, restrictions on freedoms, and the expansion of authoritarian rule, political solutions are required in addition to technical ones. We must create new decision-making spaces for implementing equitable green projects that genuinely prioritize environmental sustainability. We must shift the debate away from market-driven logic that commodifies our livelihoods and our environments. Most importantly, we need effective methods to involve citizens in decision-making and meaningful consultation, allowing them the freedom to express their aspirations and provide advance approval or rejection of projects that may impact their lives in various ways.

Gender, intersectionality and the climate crisis: women farmers in the Jordan Valley

Melissa Pawson, Engagement Editor, Beyond Trafficking and Slavery, and Freelance Journalist

Women farming in Jordan, in an area of the Jordan Valley called Ghor As-Safi, are facing increasing challenges due to water scarcity. As a journalist, I have been to interview the women in Ghor As-Safi several times over eighteen months, for articles in English and Arabic. The impacts of water scarcity on these women farmers exemplify how gender identity and intersectional marginalizations can increase communities' vulnerabilities to the climate crisis.

Jordan is an incredibly water-scarce country – reportedly the second most water-scarce in the world. In recent years, Jordan has been facing an increased demand on water resources, with a growing population and a high refugee population. These issues are exacerbated by unsustainable water policies and mismanagement of resources, as well as external impacts of climate change – such as rising temperatures and decreased rainfall. All of this means that less and less water is reaching the women's farms in Ghor As-Safi.

Women farming in Ghor As-Safi say that, four or five years ago, they were receiving water from the municipality between once a day and four times a week. Now, they are receiving water once or twice a week. This has had a huge impact on what they can grow, when they can grow it and how much, and the quality of their produce.

The rapid decline in the availability of water has contributed to high levels of debt in Ghor As-Safi, since farming has become a much less lucrative source of income. Many farmers have therefore been forced to leave the sector to look for other work. However, opportunities outside of farming are difficult to access for women – most other jobs are populated by men. So, without farming work, many women face unemployment instead.

It is, therefore, unsurprising that the majority of farmers in Ghor As-Safi are women. However, almost all the landowners are men. This means that most women are farming land that they do not own. This dynamic is leaving many women out of bigger decisions when it comes to their farming businesses – decisions such as when to sell or rent their land when yields are bad, hiring and managing employees, or even the produce they buy and sell.

This translates into the wider situation in Jordan. Across the country, more women participate in the informal agricultural workforce than men – and are therefore more economically vulnerable – which is a trend that can be seen across sectors. And where communities are less financially resilient, they are also less able to withstand financial shocks caused by extreme weather patterns and changes in the climate.

It is important to note that the women in Ghor As-Safi are not impacted by the climate crisis just because they are women – it is also because they live in rural areas, they're poor, and they're farmers. There could be dozens of other identity characteristics that also increase these vulnerabilities, such as disability, refugee status, sexual orientation, and racial marginalization.

For the women themselves, their gender identity doesn't mean much in comparison to widespread local poverty and general lack of support for local farmers. A woman living in the capital, with a university education and family wealth, may not even be able to imagine some of the challenges faced by a poor rural woman – or a poor rural man. We, therefore, cannot talk about vulnerabilities – whether it is gender and climate change, or other marginalized identities – without adopting an intersectional lens.

But when it comes to 'vulnerabilities', we need to consider carefully what kinds of narratives we are creating. The women in Ghor As-Safi are certainly not victims of this situation. They have a lot of local power – several of the women I have spoken with are the heads of local associations and the founders of local women's groups, and some sit on local municipal councils. They are speaking up and taking action on a local level. However, this doesn't necessarily mean that governments and big donors are listening to them.

Those same governments and big donors have a huge impact on the lives of these women farmers – for example, through what they choose to fund and subsidize, through free trade agreements and structural adjustment policies. But the women do not have the same impact in the opposite direction. If we as a global society are going to get closer to just approaches to the climate crisis, we need to address this problem.

The potential solutions to this are huge and complex. I certainly don't have definitive answers – particularly considering that I am an outsider and come from a position of huge

comparative privilege. This can only mean that the first step is listening to and involving people such as the women farming in Ghor As Safi,

women who rarely get a look-in at the bigger decision-making tables. Tables that extend beyond their local context and actually have the resources to make an impact.

This involvement means not just asking questions in a survey as a formality. It means prioritizing conversations with marginalized groups at a decision-making level, sharing out the decision-making powers, and restructuring consultation processes to include those most affected.

Another important step is to allow some flexibility into the identity categorizations that inform project programming. Gender and climate change are increasingly being focused on by NGOs and researchers, as if, together, they form one complete category. But people's experiences do not fit into neat boxes in this way. When I discussed this 'theme' with them, the women in Ghor As-Safi told me that there are many considerations before and beyond their gender identities, such as high unemployment, debt, and poverty.

Gender can be an incredibly important lens through which to consider the climate crisis, and through which support is directed. But we need to make sure that narratives, programs, and funding can support people across a multitude of identities. We need to ensure that approaches do not get stuck in tick boxes but instead are designed for real, complex, and multifaceted people.

In my field, shifting towards more inclusive approaches means collaborating with local journalists, platforming the voices of local communities, and involving them in the creation of narratives about identity and experience. I hope that this can be part of a step change that makes way for greater space for and trust in local voices. Many organizations and individuals are already doing great work to make this happen. But we need to do more to really make way for a just transition.

Who Is Being Left Behind?

Samah Hadid, Head of Advocacy in Media and Communications for the Middle East and North Africa, Norwegian Refugee Council.

Climate change is not a threat in the distant future, it is ripping through our region on a daily basis. We are already seeing loss and damage in fragile places across the Middle East. It can be seen starkly on display in Iraq's ancient marshlands. In a country long defined by its two rivers, the ancient marshlands of Iraq now bear harrowing testimony to the ravages of climate change. As temperatures have risen over successive years, rainfall and water flow have depleted, and the livelihoods of its farmers have steadily vanished. On a visit to Iraq, I spoke to buffalo farmers who are desperately trying to cling to this vital source of life. For thousands of years, the marshlands served as a lifeline to the people of the area. Now, the rivers are reduced to mere trickles. Through the Norwegian Refugee Council, we have documented the impact of drought on governorates in Iraq including crop and livestock losses, food insecurity, declining incomes, and drought-induced displacement of vulnerable families. The question of who is being left behind in this struggle is critical. There are voices bearing the brunt of this struggle that must be front and center of solutions, such as Huda, a

24-year-old farmer from Hawija who told us "If drought conditions continue, agriculture is going to deteriorate because if there is no water how are we supposed to irrigate the land? We are depending on agriculture to earn an income,". Samira from Mosul also shares her concerns, she was internally displaced from conflict and recently returned to Mosul to farm on her land with two children but has already seen reductions in her crop yields. She told us "I do not know what to do. I feel lost. I cannot leave my land; it is my only source of income. I know some people from the village who had to leave for the city to work as daily workers in shops. I cannot do that. Farming is the only thing I know how to do, and I am too old to be displaced [again]." Samira wants to see NGOs and the government working together "to find a solution for us" because, otherwise, she loses her land.

Such extreme circumstances have forced people to leave their homes, compounding the already existing displacement crisis in Iraq. Internally displaced Iraqis already displaced by conflict have been forced to migrate once again in response to the drought and inadequate water access in Iraq. It is clear already that increased displacement is a certainty in the future, especially given that drought spells will worsen in the Middle East and North Africa.

Millions of people across fragile and conflict-ravaged areas in the Middle East and North Africa have suffered the consequences of war and displacement and now must deal with the consequences of climate change. But conflict and displacement affected Arab states which are more vulnerable to climate change impacts are less equipped to deal with the effects on the ground.

Climate change also risks amplifying already endemic food insecurity in Iraq, Syria, and Yemen, in particular. In a region that is already overwhelmed by a series of displacement crises, the ruinous effects of climate change will push millions more to flee as incomes are wiped away and hunger sweeps in. In North Africa, an estimated 19 million people could be driven out of their homes over the next 30 years.

The water and agricultural infrastructure in these countries have in many cases been partially or completely destroyed, rendering these countries more vulnerable to climate change impacts. But scaling up climate adaptation funding to fragile and conflict-affected countries, and efforts to address climate impacts on displacement have been mostly ignored in past UN climate change conferences and in climate financing flows. There is an urgent need to set more ambitious plans to tackle the effects of climate change on displaced people – and to demand stronger action from international donors and decision-makers. The MENA region is one of the smallest recipients of climate finance in the world. Within the region, conflict-affected nations like Yemen, Iraq, and Syria receive some of the lowest amounts from the regional pot.

Countries that are the hardest hit are among the lowest emitters of greenhouse gases. The large-scale destruction they have suffered because of conflict has at times been caused by international military coalitions. And yet the vulnerable populations in these countries often receive little support from international donors.

There is also a compelling case for states in the region to advocate for significant increases in loss and damage funding. At previous climate

conferences, the world's wealthiest countries have tried to keep loss and damage funding off their agendas. They have been willing to see climate change as a collective problem but shirked from assuming the responsibilities that lie at their door. Now that we have a loss and damage fund, it needs to be filled and channeled to the most fragile.

MENA countries have the most to lose from climate impacts. Equally, they have the most to gain from ramping up their negotiations in support of stronger climate financing for loss and damage, and adaptation for the world's most vulnerable regions.

The communities that are suffering cannot afford to wait for promises to materialize in the future and we cannot leave them behind.

Panel 3: The intersections between water and food sovereignty and security?

What Role Can Civil Society Plan in Addressing Food and Water Security?

Mourad Zenasni, Professor of Economics, Universite Mohammed Premier.

Climate change, as witnessed globally today, encompasses droughts, floods, and heatwaves, with their severity expected to increase per the latest 2023 report by the World Meteorological Organization. Over the next five years (2023-2027), global temperatures are projected to rise by more than 1.5 degrees Celsius due to greenhouse gas emissions and the El Niño phenomenon, reaching record levels. This will have implications for water scarcity issues in the Arab world and North Africa, as irregular rainfall in the region urgently raises concerns about water sovereignty, a key aspect of achieving food security and sovereignty.

A 2023 joint report on hunger and malnutrition levels in the Arab region, issued by organizations including the Food and Agriculture Organization, the International Fund for Agricultural Development, the World Food Programme, the World Health Organization, UNICEF, and the United Nations Economic and Social Commission for Western Asia (ESCWA), reveals critical levels of hunger and malnutrition in the Arab region. In 2021, approximately 53.9 million people in the Arab region suffered from severe food insecurity, marking a 55% increase since 2010 and a 5 million rise from the previous year. The report also highlights that in 2020, more than half of the Arab countries' population—162.7 million people—couldn't afford a healthy diet.

Hence, similar to countries worldwide, Arab nations consider food security a major factor in ensuring national and international peace and security, particularly in an international context fraught with multiple crises. These crises encompass an increasing number of people suffering from famine, with one in nine people on Earth experiencing hunger. Additionally, the fragility of the international food system has been exposed by the Covid-19 pandemic, the Russian-Ukrainian war, and ongoing conflicts and violence in the region, such as in Yemen and Syria.

Securing water and food is regarded as a strategic and fateful geopolitical endeavor with significant implications for a sustainable development encompassing environmental, social, and economic aspects in the Arab region. Consequently, for the realization of a just transition that factors in multifaceted

social, economic, and environmental priorities, Arab states are urged, more than others, to promptly and efficiently work toward a just and sustainable future by engaging all segments of society.

In this context, civil society plays a pivotal role in this essential and critical transition. As professional organizations, community groups, labor unions, research and academic institutions, and other entities, civil society is uniquely positioned to effectively advocate for and promote food and water sovereignty in the Middle East and North Africa. It also seeks optimal empowerment strategies to achieve food and water security and sovereignty within the framework of the just transition process.

Civil society throughout the Arab world and North Africa has adopted a shared discourse on this matter. Firstly, it underscores the necessity of ensuring food availability in countries through local production, imports, or a combination thereof. Secondly, it asserts that attaining food security hinges not only on securing essential commodities in national markets but also on enabling citizens to access them at affordable prices, aligned with their purchasing power, within a food policy framework that strengthens the social fabric and fosters social mobility. Thirdly, it emphasizes the importance of individuals consuming an adequate quantity and quality of food while maintaining good health to derive benefits from their food intake. All these elements must remain stable and sustainable over time, ensuring food availability for current and future generations.

Civil society in the region also emphasizes the need to address certain irresponsible practices. These include unregulated exports of agricultural products that disregard local market requirements. Additionally, it involves unethical conduct by speculators, brokers, and monopolists who exploit weak price control oversight by central or local regulatory bodies, resulting in substantial price increases that threaten food security. Civil society also underscores the importance of preserving local seed varieties. Governments must put forth greater efforts to tackle climate change, as highlighted in the Arab Barometer's report on food security for the period 2021-2022.

Among the numerous areas where civil society can have a tangible impact, the most prominent focus remains on defending the right to food and access to water, enhancing food quality, and reducing waste. This is achieved through the following mechanisms:

- Actively contributing to the formulation of water and food policies for their respective countries.
- Participation in various national, regional, and international forums dedicated to water and food sovereignty.
- Rationalizing policies and plans while ensuring accountability among all stakeholders, including governments, state institutions, and the private sector.
- Raising awareness about the imperative of achieving food security and sovereignty through various media channels and educational platforms.
- Conducting awareness-raising activities such as seminars, study days, and training programs for different segments of society to enhance their environmental awareness, e.g., on topics like the circular economy and combating water and food waste.
- Mobilizing the masses and applying pressure when necessary.

- Expanding and fostering alliances among organizations concerned with food security and sovereignty at the national level, then creating alliances for food sovereignty in the Middle East and North Africa. This includes enhancing cooperation, particularly in education and scientific research on food security and sustainable development, and maintaining ongoing coordination and consultation, similar to alliances against hunger or efforts to achieve food security undertaken by a group of countries.

- Strengthening the global partnership and providing effective means of implementation.

- Establishing an observatory for the Middle East and North Africa to monitor the just transition. This initiative mirrors the commitment made by presidents and representatives of regional and continental parliamentary unions and national parliaments in Africa, the Arab world, Latin America, and the Caribbean in Morocco in 2019 to create a South-South parliamentary observatory for food security. The goal is to enhance communication and coordination between parliaments and industrial, commercial, and agricultural unions, providing them with monitored data and variables on food security, and building connections between these entities and those engaged in food security at regional and international levels.

- Taking concrete actions for their countries, such as implementing energy and water conservation projects.

-

-

What Role for Lebanon Food and Agriculture Civil Society Organization in an Economy in Transition?

Kanj Hamadeh, Co-founder, Economic Development Solutions.

In the mid-1990s, the Lebanese agriculture sector witnessed a boom in intensive agriculture investments. While this process could have been an opportunity to boost rural development and improve the living conditions of farmers, the absence of policies and regulations has encouraged free-riding practices. This led to an overuse of inputs, the depletion and pollution of water resources, the degradation of soils, and the extraction of farming added value and wealth by large value chain players, i.e. inputs suppliers and traders. Three key elements facilitated the development of these economically and environmentally unsustainable practices, namely the availability and overuse of agricultural inputs, relatively cheap energy, and the unfair governance of the sector.

The overuse of agricultural inputs. Benefiting from unlimited bank credit lines, inputs suppliers provided inputs to farmers on credit and encouraged the heavy use of fertilizers, pesticides, and hybrid seeds. The smaller the farmer's size the higher the hidden interest rates. In the absence of agriculture regulation and extension services, input suppliers became the quasi-sole source of agricultural credit and advice, systematically extracting agricultural added value from farmers by pushing for an environmentally and economically unsustainable mode of production.

The relatively cheap energy. Historically, Lebanon has failed to establish pressurized irrigation networks. Instead, the vast majority of farmers still use Ottoman-period open-air irrigation canals or artesian wells. The USD-LBP peg policy has lowered the relative cost of energy and incentivized farmers to increasingly use fuel-powered pumps to extract underground water and often over-irrigate their crops, gradually depleting underground water levels and increasing production costs. Paradoxically, even though energy was relatively cheap, it still constituted farmers' most important cost.

The unfair governance of the sector. Lebanon's successive governments have failed to develop policies centered on food producers that encourage sustainable forms of production and contribute to economic development and improved living conditions in rural areas. Instead, the Ministry of Agriculture – and donors – have focused on the competitiveness of export-oriented production. This approach contributed to the accumulation of wealth with large vertically integrated producers, inputs suppliers, and traders, to the detriment of small farmers. Farmers, who do lack organizational capacity, had to face individually a misfunctioning and unfair wholesale market, the monopole of large traders over post-harvest infrastructure, and the greed of input suppliers. Since the early 1990s, none of the donors' funded programs have supported farmers' capacity to organize, and take direct control over inputs procurement and production, produce aggregation, and marketing. Most of the supported cooperatives are undemocratically managed and controlled. Even in the case of women's food processing cooperatives, control over marketing channels remained in the hands of third parties – including, in some cases, civil society organizations.

With the Oct-2019 financial crisis, Lebanon's intensive agriculture mode of production "temporarily" collapsed as inputs and energy prices denominated in LBP skyrocketed, and inputs supplier credit lines stopped. In 2020, there was a concern that Lebanese farmers could not maintain their previous year's production. Many have refrained from cultivating their land or used a mix of positive and negative coping strategies that ranged from the use of local seeds and limited crop protection applications to the use of unregulated or banned pesticide mix that flooded the Lebanese market. Despite all of this, the share of agriculture from GDP increased from 3% in 2019 to 9% in 2020, showing the relative resilience of the sector and its ability to contribute to wealth generation in an economy in crisis. This resilience capacity can be partly explained by the rapid response of international organizations, which – in coordination with the Ministry of Agriculture – implemented emergency interventions in support of farmers; and partly by the existence of endogenous adaptative mechanisms, including grassroots initiatives.

Pre-October-2019, Lebanon's civil society engagement in issues related to agriculture and food has been limited to a handful of organizations that were able to channel donors' funds and implement agriculture programs. Often politically affiliated, these organizations do not carry a clear political discourse and do not advocate for policy reforms. In many instances, they have created a system of dependency by acting as an intermediary between farmers and available funds, taking control of marketing activities (in both local and export markets) and post-harvest donated infrastructure. No significant efforts have been made to support the creation of farmers' organizations that could represent farmers in policy dialogues

and/or allow them to control and manage post-harvest infrastructure and marketing channels.

Embedded within the October 2019 social movement, several agro-ecology food initiatives have emerged. These pioneers' initiatives have built grassroots organizations carrying both alternative agricultural practices and a militant agro-ecological discourse. These organizations constitute a basis for a militant agro-ecological movement. Their role is critical in advocating for pro-producer policy changes on issues ranging from intellectual property on seeds, democratic value chain organization, and the valorization of farming and agricultural labor. They have the capacity to mobilize and build farmers' and agricultural workers' agency, supporting them to adopt alternative modes of production and build efficient and democratically managed cooperative structures to end practices that create dependency relationships.

However, this nascent movement faces important challenges. The most important is its ability – away from donors' funds – to engage in an endogenous political and organizational dynamic, develop a common political discourse, and enlarge its representative base and leadership to include farmers and food producers.

Panel 4: What energy transition? Between the appetite for oil and gas and the appeal of green energy made for export

The Potential for Renewable Energy in the MENA

Clementine Lienard, Climate Security Analyst, Brussels International Center.

Although the MENA region possesses one of the greatest potentials in the world for solar energy development, it faces numerous challenges in achieving a just energy transition. Political instability, prolonged conflicts, and limited diversification of energy sources have hindered investments in the energy sector. This lack of investment, coupled with economic instability, has restricted the capacity to meet increasing energy demands, modernize infrastructure, and expand solar energy storage. Additionally, the region heavily relies on fossil fuels for both consumption and revenue, making Arab countries highly vulnerable to global price fluctuations. Moreover, despite high energy consumption rates, regional energy efficiency remains poor, resulting in wasteful consumption and higher costs for consumers.

In Lebanon, in response to the shortage of domestic energy supply, solar panel systems in residential and business units have been erratically proliferating in recent years, lacking integrated safety and sustainability planning. It is estimated that one-third of Lebanese households now have access to solar energy, but this palliative solution is affordable only for the most privileged families. The shift to cleaner energy is thereby reinforcing traditional power dynamics and inequality schemes. In general, the focus in the MENA region has primarily been on developing large-scale green energy production for export, often neglecting the need of local communities. The populations most affected by energy shortages and climate change continue to be excluded from decision-making processes.

The situation is even more dire in countries experiencing long-lasting armed conflicts. For example, in Yemen, the rural population lives in severe poverty, with 3 million families relying on firewood as their primary energy source, particularly for cooking purposes. Moreover, countries in fragile contexts that depend on oil and gas as their main source of revenue will face a decline in external demand and income as the world transitions to cleaner energies. However, these countries are still the most neglected by international green finance and climate-related initiatives. The heavy dependency on fossil fuels also exacerbates environmental challenges in the region, including water and air pollution and climate change. Therefore, the shift to a just energy transition aims not only to address environmental issues and climate change but also to overcome existing obstacles to achieving equitable, safe, and

sustainable energy access for all. It requires a stable, transparent, and accountable energy governance system to foster a comprehensive and coordinated approach.

Civil society organizations (CSOs) in the MENA region play a crucial role in promoting a fair energy transition. They provide a platform for marginalized populations to have their voices heard. Studies on women's participation in the energy sector offer insights into the gender aspect of the green transition and provide recommendations on how to achieve greater gender equality. CSOs also ensure that the process toward an energy transition is more inclusive and involves the concerned communities and stakeholders. For example, the Coalition For Energy Governance in Lebanon engages with youth and students from university to raise their awareness and involve them in energy governance projects. It also promotes competitions that encourage community-based projects, empowering local communities and enabling their active contribution to the transition.

In addition, CSOs engage with decision-makers and advocate for greater public incentives to shift towards renewable energy and also to update their national strategies. Collaboration with government entities helps drive positive change at the decision-making level and facilitates the update and accessibility of information and data. The inclusion of civil society representatives and experts in policymaking processes permits the monitoring of energy activities which increases transparency and accountability of both public and private actors. In some cases, civil society organizations can compensate where energy governance is lacking by implementing alternative renewable energy solutions. For instance, in Yemen, the local startup Biotreasure has developed biogas as a greener, more sustainable, and healthier energy source to supply rural households previously dependent on firewood. Furthermore, creating coalitions of CSOs enables more impactful actions by civil society organizations within national, regional, and international platforms. Strengthening cooperation in the field of renewable energy across the MENA region can also be achieved through the promotion of regional collaboration among MENA civil society organizations, facilitating knowledge sharing and exchanges between energy experts.

The European Union and the international community also play a vital part in supporting the MENA region's fair energy transition. The EU has committed to becoming a global leader in the green transition and to supporting its neighbors in achieving their own transitions. To ensure the fair implementation of the MENA's energy transition, the EU should consider two key aspects. Firstly, it should provide greater support in diversifying sources of income and energy for countries heavily reliant on oil and gas revenues, which currently supply the EU's energy demand with fossil fuels, including those affected by armed conflicts. Preventive measures can help mitigate the negative economic and social impacts of the green transition in the MENA region, such as exploring policy incentives or debt-release mechanisms. Secondly, the EU should foster more equitable partnerships with the MENA region in the field of green energy. To ensure that the green transition is successful and effective in the region, energy partnerships need to be revitalized, going beyond a mere system of extracting and importing green energy by ensuring that it creates benefits and opportunities for local communities.

Civil Society Movements in MENA and their Push for Just Environmental Transition

Jina Talj, Founder and Director, Diaries of the Ocean, and National Coordinator, Coalition for Energy Governance.

Civil society movements have played a crucial role in shaping political and social change in the Middle East and North Africa (MENA) region. In recent years, these movements have increasingly turned their attention to the concept of a "just transition," which seeks to address the intersection of environmental and social justice concerns in the transition to a low-carbon economy.

The concept of a just transition emerged in response to the recognition that efforts to address climate change must take into account the social and economic impacts of transitioning to a low-carbon economy. As countries around the world seek to reduce their greenhouse gas emissions, there is a risk that the transition to a low-carbon economy will exacerbate existing inequalities and create new ones. For example, workers in industries that rely on fossil fuels may lose their jobs as those industries decline, while wealthier individuals may be better positioned to take advantage of new opportunities in renewable energy. A just transition seeks to ensure that the costs and benefits of the transition to a low-carbon economy are shared equitably.

In the MENA region, civil society movements have been at the forefront of advocating for a just transition. One of the key challenges they face is the dominance of the fossil fuel industry in many countries in the region. Oil and gas production has long been a major source of revenue for governments in the MENA region, and many governments have been resistant to efforts to transition to renewable energy sources. In this context, civil society movements have played an important role in highlighting the social and environmental costs of continued reliance on fossil fuels.

One example of a civil society movement advocating for a just transition in the MENA region is the Coalition for Energy Governance in Lebanon. The Coalition was created in 2020 and engaged in several campaigns and initiatives. One of its biggest achievements was holding elections for civil society representatives in the Extractive Industry Transparency Initiative, which is a global standard that brings stakeholders together – civil society, government officials, and companies – to sit and report on the activities of the sector in each country.

The Coalition worked on amending Article 34 of the Lebanese Parliament Bylaws to allow civil society members to attend energy committees of the Parliament, ensuring transparency and information flow between decision-makers and experts from civil society. A study on the participation of women in the energy sector in Lebanon, in managerial positions, in academia, and in decision-making positions is available online with findings and recommendations. More than 200 youth from different universities across Lebanon have been trained over three years in all matters related to energy. The Coalition organized a competition for the youth where groups from each university submitted a proposal for a community-based project on energy governance and efficiency. The top three proposals won a small amount of money and were supported by the Coalition in implementing their winning projects.

One of the key challenges facing civil society movements advocating for a just transition in the MENA region is the lack of political will and support for renewable energy. Many governments in the region continue to prioritize the fossil fuel industry, and there is often a lack of investment in renewable energy infrastructure. In addition, there are often legal and regulatory barriers to the development of renewable energy projects. For example, in some countries, it is difficult for individuals or communities to sell the excess energy generated by solar panels back to the grid.

Despite these challenges, civil society movements in the MENA region have made significant progress in promoting a just transition. One of the key strategies they have employed is building alliances and partnerships with other social justice movements. For example, in many countries in the region, there is a strong tradition of labor activism. Civil society organizations working on climate and environmental issues have sought to build connections with labor unions and other organizations working on workers' rights. By highlighting the social and economic benefits of a just transition, these organizations have been able to build broader coalitions of support for renewable energy and other low-carbon technologies. Another important strategy is the use of innovative communication and advocacy techniques.

One of the key factors driving the push for a just transition in the MENA region is the recognition that climate change is already having significant impacts on the region. The region is one of the most vulnerable to the impacts of climate change, with rising temperatures, droughts, and desertification posing significant risks to communities and ecosystems. The region is also home to a number of countries that are heavily dependent on food imports, making them particularly vulnerable to global food price shocks. These factors have contributed to a growing sense of urgency among civil society organizations working on climate and environmental issues in the region.

In conclusion, civil society movements have played a crucial role in advocating for a just transition in the MENA region. By highlighting the social and economic costs of continued reliance on fossil fuels, these organizations have helped to build broader coalitions of support for renewable energy and other low-carbon technologies. Despite significant challenges, including the dominance of the fossil fuel industry and the lack of political will for renewable energy, civil society movements in MENA have made significant progress in promoting a just transition. As the impacts of climate change continue to be felt, the importance of their work will only continue to grow.

Case Studies from Iraq, Jordan and Kuwait on Energy Commitments

Ruba Ajjour, Manager of Climate Change Studies Division, Royal Scientific Society.

As part of my work, I helped Jordan, Iraq, and Kuwait meet some of their commitments towards the United Nation Framework Convention on Climate Change and the Paris Agreement by developing their Greenhouse Gas mitigation options and pathways. The Paris Agreement, in particular, contains several mechanisms to raise the ambition of countries' commitments to better align with the goal of keeping global warming well below 2 degrees C and ideally 1.5 degrees C, among these are the nationally determined contributions (NDCs), through which countries announce

their commitments to reduce emissions and strengthen resilience, and the long-term strategies (LTSs) that will guide countries' transitions to a low-carbon, climate-resilient future by 2050.

In all developed plans/strategies, energy transition (through renewables and electrification) was always a significant part of proposed climate policies where it helped countries improves their long-term climate pledges and are raising their Nationally Determined Contributions (NDCs) ambitions.

Case of Jordan

Regarding developing strategies to mitigate greenhouse gas emissions, we rely in Jordan on existing sectoral national strategies and on our national development priorities. The Jordanian economy is among the smallest economies in the region. A lack of natural resources, a high population growth rate, and the ongoing regional conflicts have posed challenges to the country's sustainable social and economic development. The country imports around 93% of its total energy, comprising almost 8% of Jordan's GDP and placing a strain on its economy. The Ministry of Energy and Mineral Resources has developed a National Energy Sector Strategy for 2020-2030. This ten-year plan aims mainly to increase self-sufficiency through utilization of domestic natural and renewable resources, as well as expansion of existing energy developments, thus reducing reliance on costly foreign fuel imports that burden its economy. The main objectives for the energy sector as per the strategy is to diversify energy sources by increasing the contribution of local energy sources to the total energy mix, increasing energy efficiency in all sectors, reducing energy costs for the national economy as well as developing the energy sector system in Jordan to make Jordan a regional center for the exchange of energy in all its forms.

The National Strategy highlighted the importance of increasing energy efficiency in the water sector by 15% by 2025 as well as improving efficient energy consumption in all sectors by 9%. Also the strategy sets a target for renewable energy to contribute up to 31% of electricity generation by the year 2030 from which we have realized 27% till 2022 (The current energy mix (2022) includes: 27 % renewables, 3 % fossil fuel, 70% Natural Gas). Jordan could increase the share of renewable energy in the energy mix, but we need storage solutions and upgrade of the national grid and we are currently working on finding feasible solutions. The international community, the government, the academia and research institution are working collectively to support in this regard.

As for the civil society organizations, in general CSOs are more interested in resilience and adapting to climate change impacts. CSOs interest in energy transition can come under the form of promoting renewables and electrification to reduce the cost of energy and improve livelihood.

The Cases of Iraq and Kuwait

Iraq and Kuwait are considered among the most vulnerable countries to the impacts of climate change; including the increase in temperatures, drought, floods, and sandstorms. The increase in temperatures will increase the electricity demand. Kuwait recorded all-time highs in peak electricity demand in July 2021, as temperatures soared to 53°C in some cities.

Iraq and Kuwait are among OPEC's largest crude oil producers and their economies rely heavily

on oil industry. Both Countries electricity sectors are almost entirely dependent on fossil fuels.

In the case of Iraq and despite its vast energy resources, the country's power sector performance suffers from unsustainable growth in power demand, coupled in inefficiencies in generation, transmission, and distribution. This resulted in a growing gap between power supply and demand and this supply gap is covered by diesel generators. The electricity infrastructure is weak owing to poor maintenance due to conflicts as well as having high rates of subsidies and uncollected and unbilled electricity. The total losses, including grid losses, non-billing, and non-collection, are among the highest in the region and reportedly ranging between 40% and 50%.

Considering the need to diversify the energy sector, and dealing with the growing shortages in power supply and reliance on generators, the need to explore alternative resources, particularly renewable energy, may seem evident. In practice, however, the issues that cripple the overall power sector would hinder the integration of renewable energy into the grid. Large-scale projects would be hampered by the high transmission and distribution losses, weak business investment. Currently small scale projects are starting to emerge but still need to overcome the absence of regulation, customer protection, maintenance services and incentives.

In the case of Kuwait electricity and gasoline is heavily subsidies and energy cost is low, this is why government officials may choose to ignore any energy transition due to concerns over losing political and electoral support. Also, investing in renewables is time consuming and would need the development of regulations and incentives schemes, as well as investing in infrastructure and maintenance services capacities and workshops.

Civil society organizations in both countries do barely have voices and in Kuwait they are currently working on things related to air and coastal pollution.

Power Dynamics for a Just Energy Transition: the Macro and Micro in Lebanon

Zeina Abla, Co-Founder Ebla Research Collective.

In the midst of the discourses on a much-needed energy transition, the entrenched power dynamics that underlie the shift are often overlooked, whether at the local, national, or international level. While a transition to renewable energy promises a shift to more just energy systems, technological and technocratic solutions are not sufficient but require analysis of power dynamics and new fuel politics. As long as the underlying power dimensions during the transition process are not addressed, the energy transition will continue to be shaped by and thus reproduces the same power structures and injustices of a fossil fuel-reliant energy system. This holds true both at the macro/national level and the micro/urban community level. Two examples from our own commissioned research in Lebanon demonstrate how power relations are being reestablished as renewable energy expands in the country.

Before the 2019 economic crises, attempts to upgrade the state electricity company's

diesel plants and convert them to gas were unsuccessful due to national "politics of apportionment" (known as Muhassassa in Arabic), in which a political elite competes for economic and political benefits from state assets. Public procurement and contracting are awarded to investors connected to the political elite (often in non-competitive bidding) along a rule that balances their political interests, notwithstanding the impact on society and a just economic development process. When this balance is disrupted, political struggles arise, leading to deadlocks that severely impact national development projects.

The ailing electricity sector in Lebanon has been affected by this situation, even before the recent crises, just like many of the country's infrastructure sectors, and the attempt to introduce renewable energy was another similar case. The politically connected investors who were already operating or awarded investments in the existing electricity sector received Lebanon's first windmill project licensing. Funding came from international financial institutions and local banks. The main challenges identified by investors and financial institutions were related to land access and allocation for the project, operational risks, and the safety of equipment due to fighting in nearby Syrian border areas or acts of vandalism, while the macro level risks related to the politics of apportionment and to macro-economic policies were overlooked. The local community had a limited understanding of the project's implications on their livelihoods and the region's economic development. Municipalities were divided and most responded in line with their political affiliation's position. The structure of the renewable energy project shows that the shift from one energy source to the other without changing the political economy pattern is blind to the principles of a just transition. Eventually, it was these macro-level political dynamics behind the economic meltdown in 2020 that put the project on hold, leading to continued energy shortage and dependence on fossil fuels.

Power dynamics also apply at the community level. In our research in 2020-2022, we observed how power relations stem from socio-cultural norms and are recreated within community-led energy governance systems. In one of the Palestinian refugee camps in Beirut, a locally led initiative emerged to address electricity problems building on previous activists' initiatives. A committee was established to find technical solutions and establish a governance system, which included local political actors and active stakeholders. However, the initiative overlooked the representation and participation of women in devising and managing solutions.

Panel 5: Financing Just Transition: Climate Finance, Reparations, Loss and Damage, and Civil Society Organizations

Existing Funding Mechanisms in the MENA Region

Amjad Bany Issa, Project Coordinator, Green Generation Foundation.

The existing climate finance mechanisms have proven inadequate in addressing the unique needs, realities, and vulnerabilities faced by the countries of the global south. This discrepancy is evident in the funding allocated to the Middle East and North Africa (MENA) region over the past two decades. Despite the pressing climate challenges in the region, the financial support provided has been insufficient.

Over the course of 20 years, the MENA region received a mere USD 1.6 billion for 164 approved projects. However, this amount is paltry when considering the magnitude of the climate crisis and the urgency of action required. The inadequacy of funding becomes even more obvious when we examine the recent trends. In 2022, a mere 11 projects were approved, amounting to USD 51 million. Such figures fall far short of what is necessary to effectively tackle the climate-related challenges faced by the MENA region.

Digging deeper into the composition of the allocated funds reveals further disparities. Out of the total USD 1.6 billion, grants accounted for USD 648 million. While grants are essential for supporting cross-cutting projects, these funds often fail to adequately address the region's specific vulnerabilities. The remaining USD 974 million was provided in the form of loans or concessional loans, primarily allocated to large-scale mitigation projects.

One example of such a project is the Noor II and III Concentrated Solar Power (CSP) Project in Morocco, which alone incurred a cost of USD 238 million. While investments in large-scale mitigation projects are necessary, they should not overshadow the need for funding adaptation and resilience-building efforts, which are equally critical, if not more so, for the MENA region.

There is a clear disparity in funding allocations between adaptation and mitigation projects. Mitigation projects received USD 1.15 billion, whereas only USD 0.34 billion was allocated for adaptation projects. The MENA region requires more funding for adaptation.[1] Investing in adaptation projects promotes socioeconomic stability in the MENA region. By enhancing water management systems, developing drought-resistant crops, and implementing climate-smart infrastructure, communities can better

1 *Charlene Watson, Liane Schalatek, and Aurelien Evéquoz, (2023). Climate Finance Regional Briefing: Middle East and North Africa, 2023, available from* https://us.boell.org/en/2023/03/06/climate-finance-fundamentals-9-climate-finance-regional-briefing-mi ddle-east-and-north

withstand the impacts of climate change. This, in turn, protects livelihoods, reduces migration pressures, and fosters economic growth.

Adaptation projects provide an opportunity for regional cooperation in the MENA region. Collaborative efforts in sharing knowledge, expertise, and resources can enhance the effectiveness of adaptation strategies. By pooling funds into adaptation projects, countries can work together to address common challenges and foster a sense of collective responsibility in building resilience.

Global climate funds, such as the Clean Technology Fund (CTF) and the Green Climate Fund (GCF), have lengthy project assessment cycles that can last from three to five years, sometimes even extending to seven years. Combined with inadequate funding, these timelines fall short of the necessary efforts to limit global warming to 2 degrees Celsius.

Challenges and Opportunities to Close the Climate Finance Gap in the Arab Region

Sara Hess, Associate Economic Affairs Officer, UN ESCWA.

The challenges to financing climate adaptation in the Arab region are vast, particularly with respect to the least developed countries (LDCs) and states confronting situations of conflict and/or political or economic crises. According to a 2022 policy brief by the Economic and Social Commission for Western Asia (ESCWA) analyzing climate finance needs and flows to the Arab Region, the costed climate finance needs for 11 Arab States are $570 billion until 2030. From 2010-2020, only $96.5 billion in public international climate finance was received for the region. These flows are heavily skewed towards only a handful of middle-income countries. Egypt, Iraq, Jordan, Lebanon, Morocco, and Tunisia received 92% of the climate finance flows to the region over the last decade; while the LDCs (Comoros, Djibouti, Mauritania, Somalia, the Sudan, and Yemen) received only 6.6%. Further, most financing is in the form of non-concessional loans, in a context where heavily indebted states have limited fiscal space to contract more debt. The funding received by the Arab States from the Green Climate Fund (GCF) amounted to only $90 million from 2016 to 2020 with the Fund committing to less than two national projects in the Arab region annually.[1]

Simultaneously, the region is also facing significant climate change-related challenges. According to projections by ESCWA's Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR), average temperatures in the region are projected to increase by 0.5 – 0.75 °C by 2035, with even higher temperature increases (1 to 1.25 °C) projected for vulnerable communities within Sudan, Iraq, and Syria. The temperature rise will lead to more frequent extreme weather events and natural disasters, which have already become evident in the form of floods and droughts throughout the region.

1 ESCWA (2022). Climate finance needs and flows in the Arab region. E/ESCWA/CL1. CCS/2022/Policy Brief.1. Accessible at https://www.unescwa.org/sites/default/files/pubs/pdf/climate-finance-needs-flows-arab-region-english.pdf

2United Nations Framework Convention on Climate Change (UNFCCC) (n.d.). Introduction: Loss and Damage. Accessible at https://unfccc.int/topics/adaptation-and-ressilience/the-big-picture/introduction#Santiago-network-for-technical-assistance

3 United Nations Secretary General (UNSG) (2023). Remarks to the Security Council Debate on "Sea-level Rise: Implications for International Peace and Security." Available at https://www.un.org/sg/en/content/sg/statement/2023-02-14/secretary-generals-remarks-the-security-council-debate-sea-level-rise-implications-for-international-peace-and-security

4 ESCWA (n.d.). Climate/SDGs debt swap mechanism. Accessible at https://www.unescwa.org/sites/default/files/pubs/pdf/climate-sdgs-debt-swap-mechanism-english_0.pdf

More funding and new financial instruments are thus needed to meet the urgent climate finance needs of Arab States.

In this context, the funding made available through a loss and damage mechanism may present an opportunity to bridge existing financing gaps. The Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (WIM) was established at COP 19 in 2013 and gained momentum at COP 27 in 2022. Loss and damage refer primarily to the loss and damage associated with human-induced climate change. It can extend beyond the costs of adaptation when damage induced by climate change renders adaptation unviable. [2]

At present, ESCWA is leading the development of a loss and damage assessment methodology to estimate the economic impact of sea level rise in coastal cities in the region, beginning with the cities of Alexandria, Egypt, and Nouakchott, Mauritania, given their high vulnerability to sea level rise. The methodology under development is based on the disaster assessment methodology pioneered by the UN's Economic Commission for Latin America and the Caribbean (ECLAC). While ECLAC's methodology was developed to cost the loss and damage associated with disasters that have occurred, in this case, the potential damage and loss costs associated with projected sea level rise are estimated preemptively, using open-source climate projections to outline the projected area of inundation. Next, economic loss costs are calculated for select economic sectors. The sectors to be costed are selected based on their contribution to the subnational and/or national economies, with the largest contributing sectors to GDP being prioritized. Finally, though not part of the costing exercise, infrastructure, and properties with historical and cultural heritage value are also described qualitatively to highlight their priceless value to society and the potential non-economic (but very real loss) they would represent in the event of loss due to catastrophic sea level rise.

The main objective in developing the ESCWA/ECLAC loss and damage assessment methodology for sea level rise is to arrive at a point where Member States are empowered to do their own loss and damage assessments using the methodology to better estimate the impact of climate change on their populations and economies. Doing so may pave the way for access to finance, especially for fragile countries and those in conflict. Such funding could provide much-needed resources that may help to compensate for GDP losses associated with climate disasters and to fund the implementation of adaptive infrastructure. This is in line with the UN Secretary-General António Guterres´s recent remarks to the UN Security Council urging the use of loss and damage funds to address the challenge of sea level rise.[3]

Climate debt swap mechanisms are another instrument that ESCWA has been pioneering to allow indebted countries to redirect (swap) interest and principal payments owed to external lenders toward domestic investments in implementing specific climate action projects

1 Middle East & North Africa Climate Roadmap (2021-2025) World Bank. Available at: https://www.worldbank.org/en/region/mena/publication/middle-east-north-africa-climate-roadmap (Accessed: 21 May 2023).

2 Watson, C., Schalatek, L. and Evéquoz, A. (2023) Climate Finance Regional Briefing: Middle East and North Africa. Available at: https://us.boell.org/sites/default/files/2023-03/cff9-2023-eng-mena.pdf (Accessed: 21 May 2023).

3 Scartozzi, C.M. et al. (2022) Integrated Climate Security Programming in Climate Finance: An Analysis of Multilateral Climate Funds. Report. Available at: https://cgspace.cgiar.org/handle/10568/127580 (Accessed: 21 May 2023).

4 Accelerating Climate Finance for Sustaining Peace in Africa (no date) cairopeacekeeping. Available at: https://www.cccpa-eg.org/publications-details/1034 (Accessed: 21 May 2023).

5 Läderach, P. et al. (2022) Climate Security in the MENA Region. Report. Available at: https://cgspace.cgiar.org/handle/10568/117616 (Accessed: 18 June 2023).

and policies. These climate investments are agreed upon with the external creditors and may be counted by external creditors as official development assistance disbursements/ climate finance pledges.[4] Such swaps could help governments manage existing fiscal burdens and enable investment in adaptation actions.

Further, ESCWA and the League of Arab States recently announced the launch of the Arab Initiative for Mobilizing Climate Finance for Water. The initiative is implemented in partnership with the Islamic Development Bank, Green Climate Fund, FAO, and the Government of Sweden and with collaborating institutions serving the region. AIM Climate Finance for Water will support Arab States to access climate finance for water by providing tailored training and technical support to prepare evidence-based project pipelines on climate finance for water, including national, regional, and multi-country projects that are inclusive of the region's LDCs.

Going forward, loss and damage funding and debt swaps are among several options to close the climate finance gap in the region. More innovative options will also need to be explored in facilitating finance, particularly for fragile states and LDCs in the region. The loss and damage costing methodology proposed by ESCWA/ECLAC, as well as the technical assistance to be provided by AIM Climate Finance for Water are important steps towards understanding the costed needs countries in the region will face. This is crucial: without a clear financial ask, there is unlikely to be an answer.

Anchoring Climate Finance in Resilience and Sustaining Peace in the MENA Region

Salma Kadry, Climate, Peace, and Security Specialist, Consultative Group for International Agricultural Research.

The MENA region is one of the most climate-vulnerable in the world. It faces extremely high temperatures, intensified floods and droughts, and sea-level rise. The Maghreb and Nile Delta regions are among the fastest-eroding regions in the world due to sea-level rise. Likewise, most of the countries in the region are water-scarce, and up to 60% of its people live in high or extremely high water-stressed areas .[1] Compounding this, the region is home to several fragile and conflict-affected countries, including Syria, Yemen, Libya, and Iraq, facing varied degrees of violence, instability, and humanitarian needs. Fragility and conflict undermine governance, cause political friction, hinder the government's ability to provide basic goods and services, and destroy infrastructure, including water, housing, healthcare, and educational facilities. In turn, this compromises the resilience of governments and populations to deal with climate change and its associated risks.

Despite being most vulnerable to climate change and least capable of dealing with its associated risks, **fragile and conflict-affected countries receive the least of global climate finance, and there is a limited possibility that this finance would reach local projects and businesses.** In the region, climate finance – provided by multilateral climate funds – is largely concentrated in a small number of large projects in the form of loans or concessional loans, funded by the Clean

Technology Fund (CTF). Around 71% (USD 1.15 billion) of climate finance approved for the region is allocated to mitigation activities, although adaptation is a top priority for the region. Egypt and Morocco are the top two recipients of climate finance, receiving 29% and 18% respectively[2]. Moreover, a recent study by CGIAR (Consultative Group for International Agricultural Researh) on integrated climate security programming[3] which assessed the conflict sensitivity of investments and programming of 22 multilateral climate funds, indicated that countries that have the highest climate vulnerability and lowest readiness receive approximately the same amount of climate funds as countries that have low to very low levels of vulnerability coupled with high to very high levels of readiness.

There are **persistent challenges** that obscure the acceleration of climate finance for fragile and conflict-affected countries in the MENA region. First, these countries find it very challenging to access climate finance due to the complexity, extensiveness, and longevity of the project formulation phase. Likewise, securing climate finance requires a set of specific skills and capacities to be able to formulate climate projects and finance requests, which in many cases could be lacking.[4] Finance planning requires data collection and the use of scientific-based evidence to inform project design, particularly those of climate adaptation/ mitigation and peacebuilding co-benefits, which are largely absent. The unavailability of reliable and consistent data sets and accurate information and indicators is a common technical constraint that hinders investors from capitalizing on possible opportunities. Second, while over the past year the Green Climate Fund approved more climate projects in fragile countries (12 out of 63 globally), climate funding is not conflict-sensitive and context-specific. Conflict prevention and peacebuilding objectives are rarely featured in adaptation programming and, currently, very few projects promote integrated approaches to climate and conflict risks. This might heighten the risk of unintended tensions, conflict, or the reinforcement of inequalities, jeopardizing "the do no harm" principle and diminishing the likelihood of resilience-building and livelihood security. Lastly, most investments in the region tend to be reactive, short-term, and sector-based and not tied to long-term resilience or an overall peacebuilding and development strategy.[5]

For these reasons, the climate finance architecture needs to be recalibrated towards **enhancing the accessibility of fragile and conflict-affected countries and grounding this finance into a comprehensive strategy for peacebuilding, resilience, and development.** The following are some key recommendations on how this could be achieved:

- **Ease entry barriers for fragile and conflict-affected countries:** Simplify the complex accreditation, management, distribution, and reporting processes for climate funds and leverage innovative and flexible climate finance and draw lessons from peacebuilding finance tools, given that – by design – peacebuilding finance targets conflict-affected countries.

- **Enhance access to localized and context-specific knowledge:** localized and context-specific knowledge can support investments in building bankable projects. Accordingly, having local contacts that are tapped into sectors or business networks within investors' target value chains can identify valuable investment opportunities that may otherwise be overlooked.

- **Conflict and fragility sensitive analysis:**

Investors need to assess and consider contextual risks beyond the standard environmental, social, and governance considerations, due diligence, and reputational assessments – through systemic fragility and conflict analysis.

- **Develop targeted financing for women and youth:** It is important to decentralize climate finance, put mechanisms in place for financing local communities, and ensure that investments and finance are informed by a gender analysis to target the specific vulnerabilities of women and youth towards diversifying their sources of income and economic opportunities as well as support their positive contributions.

In addressing the above, climate finance for sustaining peace is one of the main areas of focus on CGIAR's climate security team, which has dedicated efforts to facilitate the provision of peace-positive climate finance towards fragile and conflict-affected countries. Particularly, **CGIAR's Climate Security Investment Planning (CSIP)** aims to develop ready-to-finance interventions with dual climate change adaptation and peacebuilding objectives.

To enable and responsibly implement climate-related investments in fragile and conflict-affected countries, a framework is needed to identify areas where climate security risks are prevalent, work with local stakeholders to understand how climate and peace are related, and facilitate the development of investments that simultaneously contribute to climate resilience and peacebuilding.

Climate finance and investments should be leveraged to address the underlying causes of conflicts and promote climate resilience and peace by addressing climate-induced imbalances in access and distribution of power and resources and ensuring livelihood security. Addressing environmental challenges and resource-based disputes through adaptation and mitigation projects can also provide opportunities for collaboration and dialogue between opposing groups as well as promote the social integration of marginalized groups and women empowerment. Hence, **resilience, peacebuilding, and sustainable development should be at the heart of climate finance.**

Panel 6: On narratives and public opinion: The role of media

Climate Change and the MENA Public Opinion: Bridging the Gap to an Impactful Communication

Amine Derkaoui, Communication & Monitoring Manager, Centre de Compétence Changement Climatique Maroc.

How to communicate on something invisible to the eye? And even when visible, how to communicate on climate change impacts as a multidimensional issue with indefinite - and mostly still unknown yet - consequences?

Climate change is a global challenge with multifaced implications for the environment, society, and the economy. It is now an omnipresent societal issue debated in the public space. Alarming scientific reports on natural disasters, global warming, weather conditions, pollution levels, species extinction, and the deterioration of ecosystems are released daily, making climate change one of the most treated topics by the media in the 21st century, and creating a lookalike "general fatigue" atmosphere.

Research by Media and Climate Change Observatory found that global media attention to climate change was up by 1333% from 2002 to 2022.[1] However, this does not seem significant enough to raise individual and collective awareness of climate change, which leads to radical and widespread changes in lifestyles. Despite its implications for survival at large, climate change is believed by specialists to be "difficult to perceive and understand for most lay audiences".[2]

Roadblocks to public engagement on climate change in MENA

Perceptions of climate change in North Africa and the Levant, particularly in North Africa, have received significantly less attention in surveys compared to North America and Europe. [3] There have been limited studies that have assessed the perceptions of climate change across the entire region, and research on climate change public engagement in Arabic-speaking countries has been largely neglected.[4] However, the emergence of internet polling has started to

1 Media and Climate Change Observatory Special Issue 2022: A Review of Media Coverage of Climate Change and Global Warming in 2022 https://doi.org/10.25810/vtaz-sn25

2 Moser, S.C., 2010. Communicating climate change: history, challenges, process and future directions. WIREs Clim Change 1, 31–53. /10.1002/wcc.11.

3 Elshirbiny, H. & Abrahamse, W. Public risk perception of climate change in Egypt: a mixed methods study of predictors and implications. Journal of Environmental Studies and Sciences 10, 242–254 (2020).

4 Eskjær, M. F. Climate change communication in Middle East and Arab countries. in Oxford research encyclopedia of climate science (ed. Nisbet, M. C.) (Oxford University Press, 2018).

5 Kende, M. Middle East & North Africa Internet Infrastructure. https://www.internetsociety.org/wp content/uploads/ 2020/09/Middle_East_North_Africa_Internet_Infrastructure_2020-EN.pdf *(2020)*

address this gap, although it should be noted that these surveys may not fully represent the population without internet access.[5]

Existing data suggests that knowledge and concern about environmental and climate issues in this region are relatively low, particularly in North Africa, despite its high vulnerability to climate change. [6] For instance, a poll conducted in 2019 reveals that North Africans are the least concerned population globally about the risk of climate change to their country in the next 20 years. Only 60% of the population consider it a "very" or "somewhat" serious threat, while this percentage is around 93% in Southern Europe. [7] Similarly, a 2019 pan-African study found that while 67% of East Africans believed that climate change was already worsening their quality of life, only 46% of North Africans shared the same view. [8]

However, the scarce available data also indicates notable disparities in climate concern among Arabic-speaking countries, with respect to the vast diversity of political, social, and environmental circumstances each country encounters, as well as the disproportional efforts in mitigating and adapting to climate change.[9] In a 2020 survey, for instance, 71% of participants in Morocco concurred that climate change "exists and is predominantly caused by human activity," whereas only 26% of Egyptians held the same belief.[10]

According to a global 2021 survey [11] conducted by the United Nations Development Programme, individuals residing in Arabic-speaking states (the survey included: Algeria, Djibouti, Egypt, Iraq, Jordan, Morocco, Sudan, and Tunisia) demonstrated relatively less support for a range of climate policies compared to other regions. However, views and perceptions are subject to changes depending on various factors.

Although support for climate policies was comparatively lower in Arabic-speaking states, the top five climate policies still garnered over 40% support across the surveyed countries. These policies include:

- Implementation of resilient farming techniques (48% support)
- Adoption of solar, wind, and renewable energy (48% support)
- Conservation of forests and lands (47% support)
- Promotion of clean electric cars, buses, or bicycles (44% support)
- Increased investment in green businesses and jobs (44% support)

Approaches to impactful communication on climate change

The battle against climate change effects is also a battle of information and effective communication. This linkage is now

6 Orrnert, A. Drivers and barriers to environmental engagement in the MENA region. https://core.ac.uk/download/pdf/326905449.pdf *(2020)*

7 Lloyds Register Foundation/Gallup. The Lloyd's Register Foundation World Risk Poll: full report and analysis. https://wrp.lrfoundation.org.uk/LRF_WorldRiskReport_Book.pdf *(2019).*

8 Selormey, E. E., Zupork Dome, M., Osse, L. & Logan, C. Change ahead: experience and awareness of climate change in Africa.

9 Eskjær, M. F. Idem

10 Minawi, M. & Abudahab, N. Views On Climate Change In The Middle East & North Africa. (2020).

11 The Peoples' Climate Vote. https://www.undp.org/content/undp/en/home/librarypage/climate-and-disaster-resilience-/The-Peoples-Climate-Vote-Results.html *(2021)*

unanimously recognized among the climate experts' networks, and has been pointed out by official authorities such as the Intergovernmental Panel on Climate Change (IPCC): "Although they define the science and policy discourse, the 'big numbers' of climate change (global average temperature targets and concentrations of atmospheric carbon dioxide) don't relate to people's day-to-day experiences". [12] It has also given birth to a fully independent discipline focusing exclusively on the connection between climate change and communication, backed by the emergence - especially in Europe and North America - of NGOs and think tanks promoting research on the matter.[13] Hundreds of guidebooks and articles are now available for the public -and mainly for journalists-, provided by the IPCC, the UN communication experts, or NGOs, that outline tools and techniques for an impactful communication on climate change. The core of these techniques can be summarized as follows:

- To tell a human story of vulnerability, resilience, or adaptation, behind a climate change effect
- To talk about the real world, not abstract ideas
- To use the most effective visual communication
- To emphasize the link between climate change and justice
- To focus on opportunity and solution-based communication, rather than exclusively stressing the challenges posed by climate change

By employing these strategies, one can bridge the communication gap, raise awareness, and mobilize collective efforts. Tailoring messages to diverse audiences, simplifying complex information, and utilizing various communication channels remain key approaches to engaging and informing individuals.

Challenges to Environmental Reporting: Anonymity, Commodification, Funding

Safaa Khalaf, Investigative journalist and independent researcher.

The press plays a crucial role in promoting what can be termed "climate knowledge." In the Arab world, this involves facilitating the general public's access to factual and reliable information about climate change and water scarcity issues. However, despite its significance, climate-related issues are not receiving the attention they deserve. This is primarily due to the influence of powerful interests that exert influence on the media, including governments, corporations, and political groups aligned with capital interests engaged in unsustainable business practices.

The relentless pressure imposed by the climate crisis on populations has compelled the media to do some reporting on this issue. However, this was often done in a biased way, and included misinformation, incomplete information, downplaying the significance of

12 *Principles for effective communication and public engagement on climate change* https://www.ipcc.ch/site/assets/uploads/2017/08/Climate-Outreach-IPCC-communications-handbook.pdf

13 *For example: Climate Outreach; Yale Program on Climate Change Communication; Grantham Institute*

climate factors, or even denying the climate crisis altogether. Such actions fail to enable the affected population to form objective perspectives or understand the impending risks they face. Consequently, deliberate spreading of "climate ignorance" has become the counterpart to "climate knowledge," a trend prevalent in the coverage by traditional Arab media and platforms funded by businesses with unsustainable practices.

Achieving climate justice becomes more challenging when misinformation is widespread and the public lacks access to reliable information and opportunities for public discourse. Moreover, disorganized civil society lacks the necessary tools to influence government, industry, and investment policies related to climate change. Additionally, organized civil society, such as non-governmental organizations, often relies heavily on the visions and programs of international donors, which are frequently subject to government policies and offer limited room for mobilization.

Independent press shows greater engagement and awareness regarding climate issues compared to traditional media. Nevertheless, the scope of this emerging press is narrow, and it often does not reach a broader audience due to the nature of the platforms where investigations and in-depth reporting is published. Furthermore, most journalists lack the expertise to report on climate issues, which require a level of scientific knowledge to explain the complexities of climate change and its profound future repercussions. Therefore, the press involved in environmental advocacy requires continuous and intensive training to enhance their capacities and skills.

Given that environmental changes linked to climate deterioration necessitate on-the-ground action to monitor the crisis and its consequences on affected areas, there is an apparent challenge of insufficient funding directed towards independent investigative climate journalism. This poses a significant obstacle to sustaining the production of stories, investigations, and reports. The pace of environmental/climate change is much swifter than the accompanying press coverage because "environmental reporting" demands fieldwork in crisis areas, often rural and lacking reliable transportation services. With limited funding and small grants, journalists have few options to keep pace with the crisis and its various manifestations across different regions.

Another challenge emerges as authorities obstruct journalists' access to environmentally affected areas and adopt a policy of "environmental blackout" as a means of climate crisis denial. This includes prosecuting journalists and activists and imposing restrictions on the dissemination of environmental information, particularly concerning the illicit oil and gas industry. Such practices accelerate the destruction of local environments where extraction activities occur, depriving affected residents and the local community of transparent access to environmental justice.

Climate justice faces significant challenges, including the absence or inadequacy of necessary legislation to regulate climate action, a lack of environmental risk education, and the connection between industrial, agricultural, investment, and construction activities that harm the environment and the pursuit of economic improvement at the expense of environmental degradation.

Consequently, the prevalent rentier mindset within both the state and society creates an overarching environment that is unfriendly to environmental advocacy. This can be described as "climate blackmail" or "environmental commodification," wherein development is pursued at the cost of environmental harm. This is particularly evident in sectors such as the oil industry or investments reliant on depleting surface and groundwater resources.

A Journalist's Perspective on Yemen's Environmental Crisis

Sahar Mohamed, Yemeni Journalist.

Environmental issues, despite their complexity and significant impact on life and public health, often do not receive adequate attention and media coverage. Yemen, in particular, stands as one of the countries most affected by the climate crisis and highly vulnerable to climate change. The region experiences fluctuations in rainfall rates and rising rainwater levels, leading to torrents that result in the erosion of agricultural highlands, rockslides, and infrastructure damage. Water scarcity was already a deep-rooted crisis, exacerbated by the rocky terrain of Yemen and the fragility of water management projects, such as dams and water barriers, ill-prepared for heavy rainfall and lacking the necessary specifications. Moreover, oil pollution, especially in Hadramaut, and environmental violations committed by companies like Total Energies and Hunt in Maarib contribute to groundwater pollution, Yemen's primary water source. Despite these environmental crises, media coverage remains minimal and relies primarily on individual initiatives by journalists and environmental activists.

While there is significant media coverage of climate change and environmental issues at the regional level in the Arab world, especially investigations into environmental violations, the concept of a just transition has not gained widespread recognition in the Arab press due to limited communication between academic experts and journalists. The term is more commonly used among experts. Therefore, there is an urgent need to promote capacity-building programs for journalists in environmental journalism, familiarizing them with the concept of a just transition and supporting the creation of resources that could raise awareness about this concept.

Environmental education for children in the Arab region lags behind similar efforts and initiatives in the Western world. In the MENA region, the focus is primarily on pollution and waste removal, neglecting climate change issues. In contrast, the Western world recognizes the importance of educating children, who are the new generation likely to be profoundly impacted by environmental challenges in the future.

The conflict in Yemen has robbed the country of two decades of development, affecting all aspects of life, including the environment. Development projects have shifted to emergency interventions, and vital projects, especially in the water sector, have been abandoned, leading to the collapse of water networks in several areas. This includes the city of Taiz, where the siege has prevented access to wells controlled by militias, resulting in a portion of the city turning into a garbage dump and hindering waste removal. In addition, due to

the weakened state institutions, oil companies and traders have committed environmental violations, including stranded ships along Yemeni shores, which threaten marine life. Over ten stranded ships in the Gulf of Aden are causing evidence of toxic oil compound leaks, with the ship Daya sinking in late 2021. Total Energies' actions have polluted groundwater in Hadhramaut, resulting in an increase in cancer cases, as indicated in the investigation into black water. With institutions collapsing and oversight roles absent, the press's function as the fourth estate and corruption watchdog has waned. Despite media attention around the Total Energies case of polluting Hadhramaut, concrete actions on the ground have been lacking. This undoubtedly affects journalists' morale and leaves them frustrated. However, crimes cannot be swept under the rug, and accountability may be pursued once stability is restored in the future.

Funding stands out as one of the most significant challenges confronting journalists, particularly in relation to specialized fields such as environmental journalism. The difficulty in securing sufficient income from journalism, compounded by the limited opportunities available, poses a substantial hurdle. Despite the existence of programs such as capacity-building initiatives and production opportunities sponsored by international institutions, their availability remains insufficient. Furthermore, there is a lack of effective communication between academic experts and journalists, resulting in a disconnect between elite knowledge and public awareness. Although scientific and environmental research and production do exist, they often fail to reach journalists and the broader public.

Obtaining accurate data is another major challenge for journalists operating in conflict areas. Many international organizations that used to conduct surveys and provide data have scaled back their activities after the war, which affected data availability, especially regarding climate change. Studies and reports that offer data are limited, particularly in the environmental and climate change domains. Additionally, government agencies often lack transparency, do not cooperate with journalists, and do not publish data on official websites.

Hence, it is imperative to make concerted efforts to ensure the protection of journalists, especially those engaged in investigative reporting. A coalition of international organizations, such as Journalists in Distress (JiD) network, aims to provide support to affected journalists, provided that the harm arises from their work. The network offers financial assistance to journalists for escaping danger zones, accessing health or legal support, and occasionally addressing psychological well-being. However, these efforts fall short and do not cover the needs of all affected journalists.

Recommendations:

- Implement effective capacity-building programs for journalists in the field of environment and climate change. These programs should introduce journalists to the key climate issues in the Arab world and encourage their coverage.

- Establish an efficient mechanism and channels for communication between researchers, academics, and journalists to ensure the dissemination of important issues from experts to the general public

through journalists.

- Support environmental journalism in the Arab world by endorsing initiatives and providing grants for paid coverage of climate change issues.

- Back programs designed to protect journalists, particularly those engaged in investigative reporting that uncovers corruption.

- Facilitate discussions between journalists and experts, particularly in the field of environment and climate change, to ensure that information reaches journalists and motivate them to cover environmental topics.

- Foster alliances between civil society organizations active in the realm of environment and climate change and journalists to encourage coverage of environmental issues and enhance public awareness.

- Support the creation of educational materials focused on climate issues for children in the Arab world to promote environmental education.

About the Arab Reform Initiative

The Arab Reform Initiative is an independent Arab think tank working with expert partners in the Middle East and North Africa and beyond to articulate a home-grown agenda for democratic change and social justice. It conducts research and policy analysis and provides a platform for inspirational voices based on the principles of diversity, impartiality, and gender equality.

contact@arab-reform.net
Paris - Beirut - Tunis