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Climate Change National Dialogue

Civil Society Perspective on Climate Action Challenges and Recommendations



Prepared by the Climate Change studies Division at Water and Environment Centre- RSS In Cooperation with the Regional Climate and Energy Project, MENA at Friedrich Ebert Stiftung



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1. Introduction and Context

Climate change is the defining human development challenge of the 21st Century. Failure to respond to that challenge will stall and then reverse international efforts to reduce poverty. The poorest countries and most vulnerable citizens will suffer the earliest and most damaging setbacks, even though they have contributed least to the problem. Looking to the future, no country—wealthy or powerful—will be immune to the impact of global warming. The majority of greenhouse gases released into our atmosphere come from cities and human settlements, and the human settlements in all parts of the world are already impacted by this global challenge. Nevertheless this is where the solution lies; how we live and work together in communities and cities can have a huge impact on tackling climate change. Thinking and acting at a local level will help communities fight climate change and build resilience to climate impacts: Greening cities with parks and gardens reduce CO₂, help cool urban areas, and reduce flooding. Energy efficient buildings, low carbon public transport and encouraging cycling and walking are essential to cutting CO₂ emissions. (UNDP HDR, 2020/21).

Climate Change impacts; such as increased temperatures, decreased precipitation, sea level rise, and extreme weather events will harm infrastructure and will have a detrimental impact on water availability, agriculture productivity and human health, among other sectors. Also, the effects of climate change on various societal segments are interconnected. For example, food production can be harmed by drought. Flooding has the potential to harm infrastructure and ecosystems having an impact on the availability of food. Climate change has complex effects on the water resources, as nearly the whole water cycle is changing as a result of global warming. The availability of drinking water, property values, and other factors will all be impacted by these changes globally.

Jordan- a middle-income country -is one of the driest countries of the world. The largest obstacle to Jordan's economic growth and development is water shortage. Climate change impacts are expected to act as a threat multiplier, exacerbating existing water shortage and development challenges affecting both rural and urban household safety and health, livelihoods, and sustainable development. Jordan's vulnerability to climate risks has been aggravated by more erratic rainfall patterns, increased temperatures and an unprecedented population increase. Some country sectors are particularly vulnerable to climate risks, such as agriculture where 61 % of the cultivated land is rain-fed.



In order to better understand the roles and needs of civil society organizations (CSOs) towards climate change adaptation, the Regional Climate and Energy Project, MENA at Friedrich Ebert Stiftung and the Royal Scientific Society held consultation sessions, focus group discussions and semi-structured interviews with civil society members representing different sectors. The targeted sectors included; Water, Agriculture, Forestry, Waste, Tourism, Biodiversity, Trade Unions, Research, Academia, Youth, Industry and Private sector.

The sessions focused on introducing the principles of climate change, including providing the local CSOs within a particular sector with tailored mitigation and adaptation knowledge and finally the sessions ended with soliciting the CSOs feedback and perspectives on the difficulties related to climate change and climate action.

2. Jordan and Climate Change

Jordan is a relatively small country situated at the heart of the Middle East, and occupying an area of approximately 89,318 square kilometers. Despite the relatively small area, Jordan has a diverse terrain and landscape demonstrating a variety usually found only in large countries. The Jordanian economy is one of the smallest economies in the region. A lack of natural resources, a high population growth rate, the ongoing regional conflicts, the rising cost of health care, and the growing expectations of people have posed challenges to the country's sustainable social and economic development.

Projected Impacts of Climate Change

Based on the latest published national projections (TNC, 2014), the main climate hazards that the water sector faces in Jordan are temperature increases, precipitation decreases, increased incidents of drought and increased evaporation. Climate sensitivity indicators in water sector are determined as reduced groundwater recharge, groundwater quality deterioration, stream flow reduction and increased water demand.

In terms of Agriculture sector, poor in rural areas in Jordan are expected to face the most severe consequences of climate change through disruption of livelihood options that depend on natural resource management. The expected impacts of climate change, particularly reduced agricultural productivity and water availability threatens livelihoods and keeps vulnerable people insecure. Poor families and households are the most vulnerable group to the impacts of climate change and deserve the priority in design of appropriate adaptive measures. The major climate exposure risks associated with agriculture in Jordan were identified as temperature increase, rainfall decrease, droughts and shift in rainy season. The major sectors of high climate sensitivities are cropping systems, livestock production and livelihood and food security.



As for Biodiversity and Ecosystems, the expected impacts from climate change on ecosystems in Jordan according to climate exposure and sensitivity of ecosystems in Jordan are droughts, forest dieback, and community composition change, expansion of drier biomes into marginal lands, habitat degradation and species loss. The highest exposure to Climate Change impacts is expected to be in the Eastern and Southern areas in Jordan and in the mountainous areas in the North, according to exposure and vulnerability analysis carried by the TNC. The highest sensitivity based on vegetation type is expected to be in the northern highlands and across the Middle areas in Jordan especially the Jordan Valley. The highest vulnerable ecosystems are forests (especially in the north).

Impacts on coastal areas in Aqaba from Climate Change are expected to manifest as sea level rise, extreme rainfall events or droughts in upstream terrestrial areas, which are connected to run off, and flooding, sea surface temperature and variation in CO₂ concentrations. The northern parts of Aqaba are the most vulnerable regions for flashflood hazards since they are located downstream from areas of major wadis. In addition, they contain most of the town residential expansion areas. Despite the establishments of flood diversion channels at the northern parts of the Gulf of Aqaba, floods are still a threat, if rainfall events exceed the thresholds.

Climate Action and Institutional Arrangements

Since the Ministry of Environment was established in 2003, Jordan has undergone a rapid and effective process of enhancing its relevant institutional and policy framework for addressing climate change challenges. In 2014, the Directorate of Climate Change was established within the Ministry of Environment. The Directorate acts as the institutional hub for coordinating all climate change activities in Jordan in relation to the UNFCCC.

In 2017, the Environment Protection Law no.6 of year 2017, was published to include provisions on climate change goals which later enabled the Ministry to develop the Climate Change Bylaw No.79, 2019 which aims mainly to regulate the coordination of national efforts among relevant stakeholders to implement mitigation and adaptation measures.

Jordan is committed to its role in addressing Climate Change challenges while adhering to its national priorities and developmental objectives. Jordan is one of the first developing countries to ratify the UN Framework Convention on Climate Change (UNFCCC), and the Paris Agreement.

Jordan has submitted until now three national communications on Climate Change, and two Biennial Update Reports. These communications and reports provides GHG National Inventories estimated using IPCC guidelines, GHG mitigation analysis and scenarios as well as vulnerability and adaptation assessment. Also, Jordan has updated its first Nationally Determined



Contributions (NDCs) prior to Glasgow COP26, outlining the country's commitments to reduce its GHG emissions by 31 % until 2030 (5% an unconditional economy-wide reduction from its 2030 business as usual (BAU) scenario, and an additional 26 % conditional target of reductions with international support). In addition, to all of the above, Jordan has launched the first version of its domestic -web based multi-level- MRV system that tackles the Energy sector GHG reductions reporting and tracking for the RE and EE projects. There is a need for expansion of this system to include the remaining sectors. Additionally, Jordan has submitted its National Adaptation Plan in 2021.

Moreover, at the national level, many institutions made considerable progress in including climate change in their entities mandates. Many national institutions established climate change directorates or units to follow up with Ministry of Environment, such as the ministries of Agriculture, Water and Irrigation, Transport, The National Agriculture Research Centre, and The Royal Jordanian Geographic Centre¹.

In addition, recently the Ministry of Environment signed an agreement with King Abdullah II Centre for Excellence to update the Environment Sustainability Award for industries to enhance their commitments towards environment protection including the reduction of GHGs. The private sector is engaging as well, with a unit for energy and environmental sustainability established in Jordan Chamber of Industry, through which they work with the industries and the government to encourage low emission technologies.

At the city level, several municipalities including Greater Amman Municipality developed Climate Action Plans. These plans set out a shared vision for collaboration among the government, private sector, development partners and residents to reduce carbon emissions.

Finally, in terms of long term planning, Jordan has and updated National Climate Change Policy (2022 – 2050) that was recently launched. Also, the Ministry of Environment has announced that Jordan would be working on developing a Long Term Low Carbon development Strategy to be ready by end of 2024 this strategy will include detailed sectoral pathways to achieve the low carbon development.

3. Civil Society Perspective (per sector)

The role of civil society organizations, academia, private sector and industry is of high significance and they can serve as catalysts for advancing the climate and environmental agenda. Civil Society Organizations perspective on challenges and threats caused by climate change were sought as

¹ Jordan's Second Biennial Update Report on Climate Change to the UNFCCC, 2020.



well as their potential role in climate action. Eight sessions² and focus groups targeting key sectors were held namely targeting Water and Agriculture, Forestry, Waste, Tourism and Biodiversity, Trade Unions, Research and Academia, Industry and Private and Youth. The following sections provide brief description of the held discussions.

3.1 Water and Agriculture Session

The water sector and agriculture are the most affected sectors by climate change. The attendees were small and medium farms owners and Jordan Valley-Water Users Associations (WUAs). The farmers stated that they have been suffering from water scarcity since long but the conditions are getting worse. Discussions were around the following challenges:

- Increase in heat waves occurrences
- Decrease in water availability
- Increase of extreme events such as floods, frost and storms
- Decrease in plant lifespan and low soil fertility
- Changes in temperature caused delay in production of some crops in Jordan Valley thus overlapping with marginal areas production.
- The high costs of energy and production input
- Increase of mud and silt residues in the dams thus causing decrease in its storage capacity.
- Deterioration of water quality (increased salinity) thus affecting the productivity of some crops.
- Emergence of new pests causing new diseases and affecting production
- Marketing challenges at the local and regional level (high export costs)
- Unavailability of good and stable labor for agriculture
- Decrease of water availability for agriculture and households due to network losses
- Unclear policies and unfair decisions by the government officials

Suggested solutions were as follows:

- Need to empower WUAs working on the ground legally, technically and administratively and involve farmers in the decision-making process
- Establishing a dam below the King Talal Dam to benefit from the dam's overflow/flooding during the extreme events and as a result of decrease in the dam storage capacity.

² Around 172 attendees – The Annex has lists for all sessions and participating organizations.



- Generating hydropower from King Talal Dam to be used in agriculture sector.
- Reducing the energy prices for the agriculture sector and promote renewable and alternative energy sources.
- Reconsidering the current strict requirements for wells drilling in Jordan Valley (limited areas and large security deposit).
- Allowing farmers to use desalination and reuse the water resulting from fish farms.
- Reducing taxes and fees of agricultural products at the central market.
- Increasing the allowed number of migrant workers as well as reducing fees of work permits.
- Supporting national fertilizers producing companies selling for the local market by offering them privilege prices on the raw material (potash and phosphate).
- Increasing the capital of the Agricultural Credit Corporation, as it is the only facility supporting farmers currently.
- Establishing marketing associations/companies to classify agricultural products according to quality.
- Creating a mechanism to subsidies and decrease the cost of road transport of agricultural products, thus indirectly supporting farmers in marketing.
- Empowering the Agriculture Risk Fund and expand its coverage to all natural disasters.
- Creating membership system for the Agriculture Risk Fund allowing farmers to pay small subscription fees for each agricultural unit (to replenish the money in the Risk Fund).
- Facilitating air transportation for agriculture exports produced in JV to the European and Russian markets thus using of the competitive advantage of early production in Jordan Valley.
- Developing a policy to monitor minimum and maximum prices of vegetables.
- Creating a control system to govern and monitor the pricing of the agricultural inputs/ needs (seeds, fertilizers, pesticides), this unit can be operated by the Ministry of Industry and Trade.
- Removing taxes and customs fees on the inputs of agricultural production.
- Upgrading the water treatment and desalination plants
- Establishing specialized agricultural laboratories and promote the use of integrated pest management.
- Searching for alternative markets and reducing export costs.
- Reducing agricultural fees, regulating the labor market, and creating alternative employment
- Rehabilitating agricultural water networks to reduce losses



- Linking the farmers to early warning systems to get updates on weather conditions to be prepared and take precautionary measures in cases of extreme events

3.2 Forestry Session

The forests area in Jordan is very small and is highly threatened by climate change, illegal cutting and fire. The locals living around the forests are considered at the forefront of protection line. The sessions were attended by several environmental community based organizations. The attendees stated that the main observed negative impacts and challenges were as follows:

- Decreased rainfall, increased temperature and shifting in the rainy season
- The spread of new types of diseases
- Increase in fire incidents
- Disappearance of some flora and fauna
- Increase in water scarcity and declining soil fertility.
- Lack of financial funds at the municipality level for the purpose of adapting to the impacts of climate change.
- Lack of incentives from the government to support the transition to renewable energy.
- Bad economic conditions that led to thinking about profit at the expense of nature and the environment.
- Lack of environmental awareness.
- The lack of the principle of civic education, which includes good citizenship and knowing ones rights and duties.
- Lack of services in rural areas, which led to migration to cities.
- Lack of support for civil society institutions concerned with the environment and its preservation.
- Failure to enforce penalties on littering in public places,
- High cost of littering and waste management in the forests thus destroying natural sites.
- Poor economic conditions lead individuals to cut down trees to provide a source of heating (firewood)
- The presence of refugees has increased the pressure on natural resources.
- Absence of measures that control the quality of agricultural production

The following were the suggested solutions:

- Improving waste management through building partnerships between municipalities and civil society institutions
- Encouraging and supporting recycling projects
- Strengthen the role of civil society in environment and forests protection.



- Establishing a fund to support projects, solutions and pioneering ideas that can promote environment and forests protection in cooperation with the Agricultural Credit Corporation
- Allocating support for establishing water harvesting systems and include it in building codes.
- Using technologies and fire sensors to protect forests – these technologies should be operated by solar power.
- Increasing the number of helicopters and using drones to protect forest
- Increasing the number and areas of forest reserves
- Providing financial support to individuals to implement renewable energy and encourage them to practice water efficiency techniques and water reuse.
- Spreading awareness at all levels starting from schools and families.
- Networking with international organizations to support projects related to the environment
- Law enforcement and introducing strict penalties
- Excavating water wells to be used in cases of fire
- Setting up fire lines and coordination between institutions to protect forest and the environment.
- Planting crops that do not consume a lot of water.
- Afforestation using indigenous plants

3.3 Biodiversity, Marine and Tourism Session

The meeting was held in Aqaba, and the environmental community-based organizations (CBOs) that were invited were from the south of Jordan (Dana reserve, Aqaba, Al Qadisiya, Petra, Tafila and Ma'an). The south of Jordan is known to have a desert climate with high temperatures during the summer and moderated temperatures in winter, and annual average rainfall of less than 100 mm (Jordan Meteorological Department, 2022). The Southern area of the kingdom has the lowest population density with an average of 15 persons/ km², 56 % of the population are living in urban areas, working mainly in agriculture production, livestock and tourism for their livelihoods. The attendees stated that the main observed negative impacts and challenges were as follows:

- Decreased rainfall, increased temperature and shifting in the rainy season during the last 5-10 years which added to the already existing challenges of water scarcity and impacted communities livelihoods as follows:
 - Decreased rainfall affected the availability of water and feed for livestock.
 - Natural pastures are largely affected in Wadi Musa and Al Qadisiya.



- Deterioration of the vegetation cover in Dana Reserve and changes in the movement and migration of birds are observed.
- Wild life- flora and fauna are affected, some of the species began to disappear and some invasive plants appeared.
- Shifting in the rainy season affected the fruit trees production as well as having less cold hours affected the apple production in Al-Shobak, Tafila, Ma'an.
- Fish stocks are affected by high temperatures.
- Emerging diseases in the marine and human environment (Aqaba)
- The CBOs identified the following challenges as a result of climate change negative impacts
 - Lack of support for livestock breeders to face the decrease in the availability of water and feed in the rangelands (Al Qadisiyah)
 - Competition on water resources between sectors – mining sector is competing with the share of agriculture and municipal share (Ma'an)
 - High costs of energy caused by increased temperatures and the increased need for cooling systems (Aqaba)
 - Communities in Wadi Musa are turning to tourism as a result of the decreased productivity and income in the agriculture sector.
- The CBOs identified their needs to overcome the challenges as:
 - Better management of natural resources and justice in distribution of resources
 - Maximizing the role of the local community in managing and preserving resources
 - Improving solid waste management and involving the local community in the waste management process.
 - Promoting and supporting water harvesting projects
 - Amplify and promote local knowledge in designing adaptation measures ,
 - Involving the local community in the decision-making process
 - Engaging women and youth in the decision-making process and strengthen their role in adaptation projects
 - Availability of up to date data and research studies related to climate change sectors
 - Good selection of plants that are resistant to the effects of climate change.
 - Supporting renewable energy projects for the residential and tourism sector to reduce energy costs
 - Promoting awareness on climate change impacts, mitigation and adaptation measures through specialized media to convey the right messages.



- Incorporating climate change into school and university curricula
- The presence of government incentives and financial support for the local community.
- Encouraging investment in the tourism and renewable energy sectors
- Strengthening Governance and Transparency through strengthening the role of decentralization mainly in promoting civil society participation in local sustainable development and in improving the efficiency and effectiveness of service delivery.
- Supporting regions and the local community affected by large projects such as renewable energy projects in Tafileh.

3.4 Industrial and Private Sectors' Session

The industrial sector and the private sector businesses are considered very important in the context of climate action; since their share in emissions is considerable also these sectors can offer great opportunities of emission reduction.

An open discussion was held with representatives from Amman and Jordan industrial Chambers, cement and pharmaceutical industries and agriculture producers and exporters association. It was well observed that the private and industrial sectors were keen to be involved in climate action but they face the following challenges:

- Technical challenges
 - Lack of technical experiences and references of some of the new technologies
 - lack of knowledge of the climate change impacts and the global responses to tackle the climate change threat on the industrial and private sectors
- Legislative challenges
 - The lack of long-term plans/ policies.
 - Reoccurring changes at the legislative level thus threatening the investment opportunities/potential.
 - The lack of motivation and incentivizing plans for the investment opportunities.
 - At times there is lack of alignment and harmonization in the legislative framework
- Financial challenges
 - Recurring increase in taxes and custom fees
 - Instability and often increase in energy costs



- The lack of knowledge of the available national, regional and international funding opportunities
 - Lack of incentives and high capital cost for transfer to environmental friendly technologies/interventions.
- **The industrial and private sector communities identified their needs to overcome the challenges as:**
- Working on long term planning and stability of the legislative framework.
 - Keeping the alignment and integration of the national legislations and plans.
 - Promoting green investment opportunities by providing exemptions and ascending incentives
 - Engaging the representatives of industrial enterprises in awareness sessions. Sessions should be designed to target different level of professions.
 - Engaging the representatives of industrial enterprises in the capacity building programmes to improve the national capacities in accessing the international funds.
 - Strengthening the role of Ministry of Environment in conducting awareness sessions on climate change impacts on the industrial sector and the available international support in technical assistance, technology transfer and finance opportunities for private sector.

3.5 Solid Waste Management Session

The solid waste management sector is one of the sectors affected by climate change, and the following points illustrate the following challenges:

- Economic challenges
 - The high capital cost of the solid waste management services provided by the local municipalities (collection, transport, sorting, treatment, landfill)
 - The solid waste related- initiatives usually do not achieve a cost-recovery (awareness sessions, pilot for sorting the waste, the cost of collection and transport...etc).
- Social challenges
 - The poor enforcement of the environmental laws and imposing penalties
 - The lack of awareness of the negative impacts of the random disposal of the waste on the environment and consequently on changing the climate.



From the attendee's point of view, solutions to these problems are through:

- Improving the role of the Government in conducting the awareness sessions targeting the individuals in different geographical areas, professions and cultures.
- Improving the solid waste management following the (3Rs) approach preceding by country-level awareness plan.
- Expanding and simplify the funding opportunities of the Jordan Environment Fund.
- Allocating more funding opportunities from JEF toward the awareness campaigns on waste management.
- Creating a fund to support and improve the local waste management services. The replenishment of the fund shall be from the fines collected from individuals who break the law related to waste disposal in addition to enterprises that violate the regulations of waste management.
- Guiding the local mass media (TV, radio, internet), as part of their social responsibility, toward carry out awareness campaigns about cooperation efforts toward clean cities and best practices.
- Enforcing the waste management law including the penalties.
- Increasing the green landscape inside the cities' borders

3.6 Trade Unions Session

Trade unions are expected to have a key role in climate action, as they are highly affected by climate change negative impacts. Throughout the discussions with representatives of unions of several occupations, they shared faced challenges as follows:

- Lack of knowledge and awareness regarding the role of trade unions in the climate action and climate change agenda at the national level.
- Lack of capacity building programmes offered to the workers by the business owners/investors, to improve the workers' knowledge in climate-related issues.
- Weak awareness of trade unions role.
- Weak partnership between the Government, business owners, and the trade unions.
- Lack of coordination between different sectors to align the various unions' needs, and challenges.
- Poor work-environment (for example some jobs requires the workers in electricity and water companies to walk for several kilometers in harsh climatic conditions to collect consumption data from meters in residential districts).



- Lack of cooperation from the top-management in institutions to acknowledge needed changes for better work conditions.
- Lack of data and information that assess the impacts of new technologies on job opportunities.
- Lack of proper alignment and tracking between Occupational Safety and Health Standards and the sustainable development goals.

The attendees agreed on the following solutions to meet the mentioned challenges:

- Building the capacities of workers through tailored capacity building programs for different professional levels on issues related to climate change projected impacts, risks, as well as workers role in response measures to tackle climate change negative impacts.
- Building and develop a sustainable partnership between the Government and the Trade Unions and business owners.
- Ensuring coordination between different sectors on common aspects, which will help in identifying the needs and challenges to be integrated in climate change planning and policies.
- Engaging the Trade Unions in development of strategies and policies related to climate change.
- Submitting a request to the Ministry of Environment to include a focal point/ representative from the Trade Unions to the working groups under National Climate Change Committee (NCCC), to enable them to contribute to the national climate-related planning.
- Engaging representatives from the Trade Unions into the capacity building programs that are conducted by the Ministry of Environment to facilitate access to international climate finance/funds.
- Requesting the government to consider “Fair and Just Transition” during the planning for low carbon and climate resilient development.
- Assessing the social impacts of introducing low carbon and climate resilient technologies and policies at the national level taking into account the job opportunities it might create and their impact on the national GDP.
- Implementing capacity-building programs for workers on new introduced technologies and provide them with employment options to protect them from losing their livelihoods.



- Supporting the Vocational Training Center that works under the umbrella of the Trade Unions.
- Encouraging business owners to introduce affordable adaptation and mitigation measures in the workplace, which would bring financial, environmental and social benefits to the institutions.
- Improving the transparency and accessibility of needed data to improve the national planning towards just transition.
- Developing and enforce regulations that promote environmental and social protection programmes.
- Rewarding the institutions that adopt initiatives and measures that contribute to addressing the climate change.

3.7 Academia and Scientific Research Session

The academia and scientific researchers have a very important role in climate action. They provide scientific knowledge to support steering climate action in the right direction. During the session that was attended by academia and research centers representatives, the following challenges were identified:

- The datasets are not accurate nor reliable and they have many historical gaps.
- Data are not consistent between different national sources
- Information and data are not available and if available, they are not free for public use (Data owners ask for high cost- such as Meteorological data, GIS and satellite images)
- The updates on water monitoring, air monitoring and weather stations are slow. That is the number of Air monitoring stations need to cover more areas, and the used technologies need improvement such as using low-cost sensors
- Research needed to assess the awareness and knowledge of students about the climate change.
- Low number of faculty staff specialized in climate related sciences.
- Climate change is cross cutting, so academic programmes on climate change should be interdisciplinary.
- Lack of funds directly available for researchers
- Complicated procurement processes at universities to attain research requirements (equipment, chemical solutions, disposables, etc)



As for the solutions, the attendees suggested the following:

- Integration and cooperation between all related stakeholders to encourage scientific research researchers. (Ministry of Education, Ministry of Higher Education, Ministry of Environment, key line ministries and national institutions including the financing institutions)
- The government should support data availability for scientific research by building a national database for climate change.
- Improving the accuracy and consistency of the national data through quality programs.
- Cooperation with international universities to get scholarships on climate change studies.
- Seeking funds to conduct national surveys on the awareness and knowledge in schools and universities (students and faculty) on issues related to climate change and its relevance to science and human behavior.

And based on the outcomes, selective courses can be introduced to improve the knowledge of the students on climate change impacts and risks.

- Recommend the Accreditation and Quality Assurance Commission for Higher Education Institutions to review and improve/update the curricula and university programmes to be aligned with international standards and job market needs
- Updating/reviewing the regulations related to funding the Scientific Research to be more flexible.

3.8 Youth Session

Young people always have an active role in climate action and mostly have their creative views. Giving them the opportunity to have a leading role will enrich and boost the climate agenda and action. During the discussions, the following challenges and recommendations were identified.

Challenges:

- Lack of awareness of the public about the issues of climate change and the environment
- Lack of interest from government officials on issues related to climate change
- Lack of sufficient support and funding to implement initiatives related to climate change
- More focus needs to be given for environmental issues and climate change with the national curricula of the Ministry of Education.
- Need to empower youth with knowledge on issues related to water and the environment.
- The lack of job opportunities within the environmental sector.



- Women's participation and awareness in the climate and environmental issues needs to be strengthened.
- Lack of support for environmentally friendly projects
- Non-compliance with the application of laws related to the preservation of the environment
- Technological development and knowledge transfer are needed
- Limited implementation of creative environmental projects in certain governorates
- Absence of implementation of strategic plans related to climate change and lack of law enforcement when it comes to environment protection.

Suggested solutions:

- The need to empower and advance the role of youth within the environmental sector in general and at the Ministry of Environment in specific.
- Building youth capacities and strengthen their networking with national and international organizations specialized in climate change
- Involving young people in formulating environmental policies and preparing action plans for them, and be part of the implementation process
- Making young people part of official delegations, participating in environmental conferences, official negotiations and preparing reports
- Establishing environmental incubators in all governorates and official universities
- Empowering the national institutions specialized in climate change
- Organizing training campaigns on climate change issues all over the Kingdom.
- Reviewing the curricula and improve the way climate change lessons are presented (should be innovative to attract students attention).
- Introducing effective internship and fellowships at official institutions and international organizations working on climate and environment.
- Supporting projects financially and technically related to agriculture in particular, and making the principle of environmental friendliness an essential part of project evaluation and financing
- Supporting and training women to recycle organic waste, such as compost projects and
- Promoting rooftop farming and recycling projects as income source for youth.



4. Conclusions and Recommendations

Throughout the discussions with 172 persons (76 female and 96 male), we had the following main conclusions and recommendations:

- **Climate change poses challenges** at many levels; it challenges us to focus on social justice and human rights across all generations and sectors. It also challenges governments and communities to undertake strong collective action based on communities best interest and based on shared values.
- **Lack of natural resource, mainly water and energy**, makes the country vulnerable to any external shock (namely; refugees' influxes and COVID 19).
- Jordan has made many advances in **climate change institutional and regulatory framework** serving as strong foundations for effective climate action at all levels
- **Social and economic development** in Jordan are threatened by climate change negative impacts.
- **Economic growth and people's wellbeing are highly influenced** by high-energy prices and water scarcity. Nevertheless, **Jordan has significant opportunities to invest in green growth and recovery options** that can result in emission reduction and resilience co-benefits in agriculture, energy and industrial sectors.
- **The cost of adaptation is quite high** (NAP, 2021 and NDC, 2022) and mobilizing climate finance is becoming a priority.
- All stakeholders have to work together to strengthen and regulate **research and capacity building programs in the area of climate adaptation** as well as develop **data management system for climate change adaptation**.
- **Improvement of the investment environment** through introducing policies and regulations across key sectors is needed to attract climate finance from external sources and from the private sector. This calls for greater engagement with the private sector on the climate change agenda and progress in addressing barriers to greater private sector involvement (Jordan CCDR, 2022).
- **Promote innovation and entrepreneurship, and empowering women and youth** could be considered the winning approach to promoting climate action, resource-use efficiency, and transition towards clean energy, climate smart agriculture, and low emission technologies in industry.
- **Civil society participation in climate action are generally considered weak** and it needs to be strengthened by all actors and across all sectors. The complex and cross cutting nature of climate change poses great difficulties with reference to managing GHG mitigation and climate adaption measures.



- **Civil society organizations require institutional and human capacity building** to be able to operate effectively and to lead change on the national level across all sectors.
- **Civil society organizations require capacity building in accessing domestic and international climate finance.** The Ministry of Environment as the national focal point for climate change should include civil society organizations in capacity-building activities through its national and international partners and should keep them informed with funding opportunities.

Finally, the number of registered **civil society organizations** in Jordan working on environment has increased noticeably over the last years. This shows that there is a political will to enhance civil society engagement in the environmental field. However, for effective engagement and inclusion, Jordan needs to have an **enabling environment** governed by a legal structure coupled with a systematic participation framework in decision-making, planning, implementation, monitoring and evaluation.



5. References

- Jordan's Third National Communication on climate change to the UNFCCC, 2014.
- Jordan's Second Biennial Update report, 2020.
- Climate Change And Civic Space IN MENA, ICNL, 2021
- National Adaptation Plan of Jordan, 2021
- Updates Jordan's Nationally Determined Contribution, 2021
- UNDP Human Development Report, 2020/21.
- Jordan Country Climate and Development Report (CCDR), 2022

6. Annex

Attendees' lists

Sector	Governorate	Civil Society organization	Attendees Number
Tourism and Biodiversity	Aqaba	- جمعية أبناء ضانا التعاونية - جمعية صيد الاسماك - جمعية الأنوار - جمعية الجنوب للحفاظ على البيئة والمجتمع - جمعية سيدات الطفيلة الخيرية - جمعية نساء العقبة - جمعية برضانا التعاونية - جمعية صيادي ثغر الاردن - جمعية العقبة للغوص البيئي - جمعية ينابيع البترا البيئية - جمعية شباب معان - جمعية الربيع لحماية البيئة - JREDs - RSCN - UNICEF	Total: 30 Females: 11 Males: 19



Sector	Governorate	Civil Society organization	Attendees Number
Waste management	Amman	- جمعية شرق عمان لحماية البيئة -جمعية السنابل - جمعية اعادة استخدام المخلفات البيئية - المركز الاعلامي في جمعية البيئة - جمعية التنمية الحضرية - جمعية التغير المناخي JACCEPS -جمعية مشاورنا لصفر انبعاثات - مديرية زراعة وادي الاردن -وزارة السياحة والآثار	Total: 17 Females: 8 Males: 9
Forests	Ajloun	- الجمعية الملكية لحماية الطبيعة - جمعية سيدات عجلون الخيرية - جمعية التنمية للإنسان والبيئة الاردنية - جمعية البناء والبنية والتنمية المستدامة الاردنية - جمعية جراسا للسيدات الخيرية - منتدى عنجرة الثقافي - جمعية تبنة الخيرية Eco Youth - - جمعية سيدات سماء جرش الخيرية	Total: 22 Females: 15 Males: 7
Water and Agriculture	Jordan Valley	WUAs - مزارعين - جمعية 55 - جمعية 33 - جمعية 24 - جمعية 50	Total: 22 Females: 0 Males: 22
Trade Unions	Amman	- JCC and other commerce chambers - نقابة العاملين في الكهرباء - اعلامي الاتحاد العام لنقابات العمال - نقابة العاملين في الصناعات الغذائية - نقابة المناجم والتعدين	Total: 27 Females: 12 Males: 15



Sector	Governorate	Civil Society organization	Attendees Number
		-النقابة العامة للعاملين في المياه والصناعات الغذائية -النقابة العامة للبتروك والكيمويات -نائب رئيسة لجنة المرأة في الاتحاد العام لنقابات عمال الأردن العاملين في الخدمات الصحية	
Industry and private sector	Amman	- JCI, ACI, ICI and ZCI - Representatives from industries -WANA -JCI -JEPA - Manaseer group - Dar Al Dawa	Total: 10 Females: 4 Males: 6
Research and Academia	Amman	- Jordan Univ. - JUST - Yarmouk Univ. - Al Balqa Applied Univ. -Hashemite University - Philadelphia University -WANA - NARC	Total: 13 Females: 8 Males: 5
Youth	Amman	مراكز شباب الشمال والجنوب والوسط	Total: 31 Females: 18 Males: 13