



PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Increasing the resilience of displaced persons (DPs) to climate change-related water challenges in urban host settlements
Countries:	Lebanon, Jordan
Thematic Focal Area ¹ :	Disaster risk reduction and early warning systems
Type of Implementing Entity:	Multilateral
Implementing Entity:	United Nations Human Settlements Programme
Executing Entities:	Lebanon: Ministry of Environment; Ministry of Energy and Water; Ministry of Social affairs; Line departments in Zahle Jordan: Ministry of Environment, Ministry of Water and Irrigation; Ministry of Planning and International Cooperation; Line departments in Irbid and Mafraq
Amount of Financing Requested:	USD 14 million

Project / Programme Background and Context

Problem: Most urban settlements in the Mashreq (and MENA) region suffer from water challenges – which are compounded by a combination of rapid influx of DPs and climate change impacts.

The Mashreq region is already experiencing the impacts of climate change, with temperatures expected to continue to rise and rainfall to decline, leading to more frequent and longer droughts.² There are consistent and significant warming trends across the Arab region as a whole with clear increased frequencies of warm days and warm nights, higher extreme temperature values, fewer cold days and nights and shorter cold spells since the early 1970s.³

The general change in temperature in the Arab region for RCP 4.5 shows an increase of 1.2 °C–1.9 °C at mid-century and 1.5 °C– 2.3 °C by end-century. For RCP 8.5, temperatures increase to 1.7 °C–2.6 °C for mid-century and 3.2 °C–4.8 °C towards end-century. Future precipitation projections show that changes vary considerably across the Arab region with some areas showing increasing trends such as the south-eastern Arabian Peninsula and some parts of the Sahel while other areas show declining trends such as the Atlas Mountains in the west and upper Euphrates and Tigris rivers in the east.⁴ According to the World Bank,⁵ the Arab region, including Jordan and Lebanon, suffer from droughts / 'chronic water scarcity. Vulnerability to climate change impacts on water resources for both mid- and end-century projections is nearly equally divided between areas of moderate and high vulnerability.⁶

¹ Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

² <http://geoagro.icarda.org/en/cms/category/maps/4/regional>

³ UN-ESCWA et al. (2017) Arab Climate Change Assessment Report (RICCAR initiative)

⁴ UN-ESCWA et al. (2017) Arab Climate Change Assessment Report (RICCAR initiative)

⁵ World Bank (2012) Adaptation to a Changing Climate in the Arab Countries

⁶ UN-ESCWA et al. (2017) Arab Climate Change Assessment Report (RICCAR initiative)

Jordan and Lebanon exhibit Mediterranean climate of warm, dry summers and rainy, cool winters⁷. Jordan has experienced a change in temperature. Mean annual temperatures in Amman have increased by more than 1.5 degrees over the past half century. Precipitation has already decreased in the region and also in Jordan itself (by more than 50 mm per year over the past half century in Amman), and the number of heat extremes and days with extremely high temperatures has increased. Climate change vulnerability of Jordan and impacts climate change are expected to affect sustainable development, economic growth and society⁸.

Based on outcomes from Jordan's Third National Communication Report to UNFCCC (2014), serious vulnerability and impacts results are expected based on modeling and projections analyses. The climate models give a more consistent trend towards a drier climate. Predicted trends indicated that the annual precipitation tends to decrease significantly with time. The report shows that the mean and maximum temperatures over the full country of Jordan will be 2-4 degrees higher, precipitation will be 15-20 percent lower and potential evapotranspiration about 150 mm higher by the end of the century. According to the report, in 2070-2100 the cumulated precipitation could decrease by 15 percent. The decrease would be more marked in the western part of the country. Simultaneously, the mean, maximum and minimum air temperature tends to increase significantly by 0.02, 0.01, and 0.03 °C/year, respectively. On the other hand, the relative humidity tends to increase significantly by an average of 0.08 percent/year. In addition, the dynamic projections predicted more extremely likely heat waves and likely drought events, dry days, and potential evaporation among other potential impacts.

In Jordan, water demand distinctly exceeds supply as water availability per capita has declined significantly, from 3,600 m³ per capita in 1946 to only 145 m³ in 2008.⁹ This will make some areas unliveable, reduce agriculture lands and put more pressure on already scarce water resources, potentially increasing displacement, the continuous risk of social unrest and conflicts and migration to host settlements already struggling to provide basic services. Water resources in Jordan are vulnerable to climate change. Previous studies, strategic documents (i.e. Jordan's SNC (2009) and National Climate Change Policy (2013)) have identified scarcity of water resources as one of the major barrier facing sustainable development in Jordan; a situation that will be magnified by climate change.¹⁰ The sector will be most heavily affected by climate change impacts will impose further stress on national water resources. Water-related impacts include reduced total water availability, less reliable seasonal patterns, increasing intensity of droughts during which reservoirs are not refilled, groundwater is not recharged and rain fed agriculture suffers damages, increasing intensity of flood events during which water and other infrastructure experiences overflow and damages. High rainfall events also increase erosion which causes losses of soil water storage and siltation of reservoirs. Higher temperatures cause higher evaporative demand and hence higher irrigation water demand. Higher temperatures also affect the efficiency of wastewater treatment plants.¹¹ Jordan has been subjected to additional water stress due to the influx of displaced peoples from neighbouring States. Since 2011, Jordan has received approximately 657,000 Syrian DPs who are situated in urban settlements and placing additional pressures on Jordan's scarce water resources. There have also been indications of risks of pollution of the main aquifer lying beneath the Zaatari camp due to wastewater leakages. Another risk is the overpumping of the Amman-Zarqa aquifer.¹²

In Lebanon, climatic changes are expected to have diverse implications for Lebanon's environment and socio-economic structure. Extreme weather events can have adverse impacts on public health, human settlements, transport infrastructure, agriculture production and power supply. The fragile

⁷ Idem

⁸ Jordan Third National Communication on Climate Change

⁹ MWI (Ministry of Water and Irrigation, Jordan) (2009): Water for Life. Jordan's Water Strategy.

¹⁰ Jordan Third National Communication on Climate Change

¹¹ Jordan Ministry of Water and Irrigation: Climate Change Policy for a Resilient Water Sector, 2016, page 3

¹² UN-ESCWA et al. (2017) Arab Climate Change Assessment Report (RICCAR initiative)

biodiversity, ecosystems, and natural habitats will be threatened by increased forest fires, pest outbreaks and sea level rise. The country's vulnerability assessment identifies the agriculture, forestry, water resources, human health, coastal zone, and tourism sectors as most vulnerable with distinctive social, economic and environmental implications¹³.

Projections results show an increase of 1.2°C and 1.7°C by mid-century and a decrease in precipitation by 4 to 11 percent by the end of the century. For Zahle, projections show a 6-15 percent decrease in the annual total rainfall (mm)/number of days by 2098 under the SRES A1B scenario¹⁴. Droughts will occur 15 days to 1 month earlier, and countrywide drought periods will extend 9 days longer by 2040 and 18 days longer by 2090. The already dry regions, such as the Bekaa, Hermel, and the South, will experience the sharpest effects. Climate change will cause a decline in water availability in Lebanon as snow will melt earlier in spring affecting spring recharging and decreasing water availability for irrigation in summer. The decline in precipitation will also negatively affect the recharge of rivers and groundwater. Anticipated changes in climate would reduce the nation's exploitable supplies of water by about 1 percent in 2020, 8 percent in 2040, and 29 percent in 2080¹⁵. (This is even aggravated by the fact that water demand in Lebanon increased 28 percent between 2011 and 2017, which is directly linked to the Syrian crisis.¹⁶

There are adaptation challenges for the water sector in Lebanon, ranging from institutional to political and technical obstacles. The lack of coordination between ministries on water issues and flat rates tariffs policies coupled with weak technical knowledge of Integrated Water Resources Management, lack of awareness and financial constraints represent barriers towards adaptation to climate change for the water sector that have been aggravated by border conflicts and DPs crisis¹⁷. Based on available national level data focused on target areas, the target cities were selected because of a combination of existing and projected climate change-related water challenges, high pressure on water resources due to high influx of DPs and lacking resources and capacities to address these climate change-related water issues and specific needs of DPs (which is the justification for the funding request).

In recent years, millions of people have been displaced and migrated from Syria.¹⁸ Lebanon and Jordan are among the top DP host countries: Lebanon is the third largest hosting country in the world (and first if compared to the size of its national population) and Jordan the seventh.¹⁹ Although some moved to camps, most (85 percent in Lebanon²⁰ and 83.3 percent²¹ Jordan) settle in cities, often in informal communities. This movement is impossible to stop as people search for security, livelihood opportunities and a decent life. Unfortunately, due to lack of planning and resources, many find themselves in communities that lack basic infrastructure and services, of which water challenges are seen as a major problem,²² often leading to health and livelihood issues, social unrest and further migration.²³ Moreover, the majority of DPs from Syria live under the poverty line²⁴ and lack legal residency making it difficult for them to find a job. In Lebanon, 33 percent of households have no working members and this directly affects affordability of water as 34 percent of households rely on bottled water²⁵. There is a decline in funding for support to countries like Jordan and Lebanon

¹³ Lebanon Third National Communication on Climate Change

¹⁴ Ministry of Environment and UNDP (2011) Lebanon Second National Communication on Climate Change – Public Health

¹⁵ Lebanon Third National Communication on Climate Change

¹⁶ Lebanon crisis response plan 2017-2020

¹⁷ Lebanon Third National Communication on Climate Change

¹⁸ The Syrian Arab Republic is the biggest sending country of refugees registered by UNHCR in the world (5.5 million out of a total of 18.5 million - UN-Habitat 2018. Migration and inclusive cities: A guide for Arab city leaders

¹⁹ UN-Habitat 2018. Migration and inclusive cities: A guide for Arab city leaders

²⁰ Lebanon crisis response plan 2017-2020

²¹ UNHCR fact sheet, August 2018.

²² See Jordan and Lebanon INDCs and Lebanon crisis response plan 2017-2020

²³ <https://video.ecc-platform.org/videos/links-between-migration-and-climate-change>

²⁴ UN 3RP: Regional Refugee & Resilience Plan 2018-2019.

²⁵ UNHCR, UNICEF and WFP (2017): Vulnerability Assessment of Syrian Refugees in Lebanon

that face DPs crisis²⁶. For example, US\$ 2.035 billion is needed to support Syrian DPs in Lebanon of which 30 percent only is funded²⁷. This will make adaptation to climate change in areas where DPs reside even more difficult.

Need: The scale and nature of the Syrian crisis and climate change challenges in Mashreq (and MENA) region requires a shift in development approach - a need for better and more effective regional, national and local programming focused on addressing resource scarcity issues in cities exacerbated by both the influx of DPs and climate change impacts.²⁸ For an overview of needs, see annex 1. There is enough evidence that water challenges will likely grow for Irbid, Mafraq and Zahle in the future due to climate change impacts. There is also a clear link between influx of Syrian DPs and increasing pressure on water resources in these areas. Both challenges are coupled with adaptation challenges in both countries. Common adaptation challenges for the two countries are financial constraints to implement climate action. For example, the financial deficit in the municipality budget for Greater Mafraq has reached 107 percent due to the impact of the influx of Syrian DPs²⁹. Also, the lack of awareness at the community level, weak coordination between relevant authorities and need to spend more on research and capacity building to apply low-cost innovative solutions³⁰. It can also be observed that there is a city-level knowledge gap needed for sound adaptation interventions at the local and municipal levels.

As most DPs live in cities, solutions focused on their needs and negative climate change impacts must target host cities and towns.³¹ The shift from a focus on camps to cities and towns means changing the paradigm for how humanitarian and development agencies work with DPs. Instead of providing stand-alone solutions to DPs in camps or rural areas, the challenge is to support host communities to adapt / scale up existing services, shelter and jobs to meet the needs of both the original residents and DPs,³² considering the impacts of climate change, especially increasing water challenges, on these services.

Syrian DPs in Jordan and Lebanon are specifically vulnerable to climate-induced water challenges. Many of the DPs have now been in the host country for four or more years. While the vast majority of Syrian DPs continue to be geographically integrated with host communities in urban, peri-urban and rural areas, they are increasingly vulnerable. Currently, over 85 percent of Syrian DPs, living outside of camps in Jordan,³³ are below the poverty line and more than 76 percent of Syrian DPs are below the poverty line in Lebanon³⁴. In Jordan, many DPs in non-camp settings are Shelter, Education and Health vulnerable not because these services are not available but because they are not able to afford them or because of the associated costs (e.g. Transportation costs). The Jordan Refugee Response Plan identifies 64 percent of cases in the Northern region as highly vulnerable (including Irbid) while the East (Mafraq) is the second highest region in the percentage of DPs rated highly vulnerable or above³⁵. Poor Syrian families remain vulnerable to losing access to WASH services. The Jordan Refugee Response Plan survey shows that 32 percent of cases are identified as severely vulnerable due to spending over 25 percent of their expenditure on WASH items³⁶. In Zahle, more than 50 percent of male refugees were not working. Most Syrian refugee women (93 percent) were not working. Zahle had the highest share among Lebanese cities (42 percent) of

²⁶ UN 3RP: Regional Refugee & Resilience Plan 2018-2019.

²⁷ UNHCR, UNICEF and WFP (2017): Vulnerability Assessment of Syrian Refugees in Lebanon

²⁸ World Bank et al (2017, policy note September 14): Refugees in the middle east. Bringing an urban lens to the forced displacement challenge

²⁹ ILO (2016) Local Economic Development Strategy For Mafraq Governorate (2016-2018)

³⁰ Jordan Third National Communication on Climate Change and Lebanon Third National Communication on Climate Change

³¹ Idem page 21

³² Idem

³³ UNHCR fact sheet, August 2018.

³⁴ UN 3RP: Regional Refugee & Resilience Plan 2018-2019

³⁵ UNHCR (2015) Jordan Refugee Response Plan

³⁶ Idem

households relying on cash from humanitarian organizations as a source of income and 80 percent of households depended on informal loans as a source of income³⁷. This leaves most of the DPs susceptible to impacts of climate change and with weak adaptive capacity.

In addition, there are a number of specific challenges across the region, including limited job access and livelihoods opportunities, exhaustion of savings, and the adoption of negative coping mechanisms, which further exacerbate the residual protection risks they face. Broader political and social pressures can also affect stability between displaced populations and host communities in both countries. There are over 10,000 Syrian displaced children recorded in the Arab region as either separated, unaccompanied or in institutional care.³⁸ The loss of social networks further decreases the adaptive capacities and make DPs more vulnerable to climate change.

The project addresses adaptation challenges to the climate-induced increase in droughts, and pressure on water services due to influx of DPs. The project identifies DPs as the most vulnerable due to socio-economic challenges that could affect affordability to access water in the target areas.

Target area:

- Type 2 DPs host cities: cities under widespread stress from displaced persons – which significantly impacted the overall absorption capacity, including urban systems and services such as water supply (exacerbated by climate change), sanitation, education, and health services.³⁹

Lebanon: Zahle and surrounding 3 municipalities with focus on poorest / informal communities with large number of DPs. The total population of Zahle (including 25,409 Syrian DPs⁴⁰) is 80,282. The population of targeted surrounding municipalities: Qobb Elias: 33,680 (21,391 Syrian DPs⁴¹), Taalbaya: 22,436 (9,102 Syrian DPs⁴²) and Saadnayel: 24,374 (17,266 Syrian DPs⁴³).

Jordan: Irbid and Mafraq with focus on poorest / informal communities with large number of DPs. The population of Irbid is estimated at 950,000 and the population of Mafraq is estimated at 206,920 in 2017⁴⁴. Number of Syrian DPs in Irbid is 135,132 and in Mafraq is 157,446.⁴⁵

Figure 1: typology of settlements⁴⁶

³⁷ UNHCR, UNICEF and WFP (2017): Vulnerability Assessment of Syrian Refugees in Lebanon

³⁸ UN 3RP: Regional Refugee & Resilience Plan 2018-2019

³⁹ World Bank et al (2017, policy note September 14): Refugees in the middle east. Bringing an urban lens to the forced displacement challenge

⁴⁰ UNHCR 2018

⁴¹ Idem

⁴² Idem

⁴³ Idem

⁴⁴ Department of Statistics (DoS) - Jordan

⁴⁵ UNHCR

⁴⁶ World Bank et al (2017, policy note September 14): Refugees in the middle east. Bringing an urban lens to the forced displacement challenge

			
TYPE 1 Cities with localized displacement impact	TYPE 2 Cities under widespread stress from displacement	TYPE 3 Cities and towns heavily affected by conflict damage	TYPE 4 Urbanizing camps
 <small>Photo credit: Aros46</small>	 <small>Photo credit: Bahner Puster</small>	 <small>Photo credit: Richard Harvey</small>	 <small>Photo credit: Mohamed Azair / World Bank</small>
Example: Amman, Beirut	Example: Zarqa, Irbid, Mafraq, Tripoli	Example: Aleppo, part of Homs, Raqqa	Example: Syrian camps near Zarqa and Mafraq

Target groups:

- DPs as main vulnerable group within host cities⁴⁷ with consideration of gender (women, girls, boys and men), youth and people with specific needs (e.g. disabled).
- The 4 components of the project will target all of the Syrian DPs in Zahle and its surrounding 3 municipalities (73,168) and 25 percent of the total Syrian DPs in Irbid and Mafraq (73,168) as direct beneficiaries. The indirect beneficiaries are the hosting communities in the targeted areas who will benefit indirectly from the intervention in those cities. Since the number of DPs targeted will be the same, then the amount of funding requested is equal.

Project / Programme Objectives

Challenges / objectives	Development approach applicable to DPs crisis and climate change context
Overall objective: Increasing the resilience and adaptive capacities of displaced persons (DPs) to climate change-related water challenges in urban host settlements. This will indirectly increase the resilience of hosting communities where the project interventions will take place.	
1. Increasing institutional resilience of cities in a regional context: Managing urban risks and vulnerabilities and managing rapid urbanization and city's physical form	Collecting evidence and developing an integrated development approach to regional migration / DPs crisis and climate change challenges: regional and sectoral studies, monitoring and planning Forward-looking / pro-active urban and land use planning: planning for future influx of people and climate change impacts in an integrated manner (that allows for coordinated investment in infrastructure and services).
2. Enhance ownership of citizens, inclusion of DPs and livelihood support:	Citizen engagement: minimizing risks to social tensions through citizen engagement and enhancing opportunities for social exchange between host-city inhabitants and DPs

⁴⁷ In line with Jordan NAP

Bridging the divide city and creating jobs and supporting livelihoods of DPs.	Livelihood support: providing livelihood support such as skill building, training, and access to finance to build people's self-reliance
3. Increase community-level resilience to water scarcity: Addressing adaptation challenges, improving living conditions and expanding the coverage and quality of basic infrastructure services	Settlement upgrading: Area-based approach for upgrading basic services that also provides opportunity to target people living in the area for complementary social, economic and other interventions
	Infrastructure and services projects: Expanding and strengthening water infrastructure and services that are strained and/ or damaged with an aim to expand coverage, improve quality of services and increase adaptive capacity to climate-induced water challenges.
4. Improve policies and plans to increase urban resilience (in the region)	Improvement of policies and plans by developing a 'regional' DPs and climate change management and monitoring approach and model for type 2 cities and by considering gender and climate change in (regional) migration policies and strategies and the other way around.

Project / Programme Components and Financing

Project/Programme Components	Expected Outcomes	Expected Outputs	Countries	Amount (US\$) (very rough estimations)
1. Managing urban risks and vulnerabilities and managing rapid urbanization and city's physical form	City-level and regional Institutional capacity to manage both urban climate change risks / vulnerabilities and influx of DPs	<ul style="list-style-type: none"> - Regional emergency action plan for urban drought management - Urban land use strategies for target cities (considering DPs influx and climate change impacts) - Trainings provided at city and national level. 	Lebanon, Jordan	2 million

2. Citizen engagement and livelihood support	Increased adaptive capacity and resilience and reduced vulnerability of DPs to climate change. Community-level ownership and livelihood skill building enhanced	<ul style="list-style-type: none"> - Providing community-level platforms for social exchange and research-based discussions focusing on urban adaptation to climate change - Community level skill building, trainings and plans developed for constructing and maintaining resilient water systems 	Lebanon, Jordan	1,5 million
3. Resilient water service sub-projects at community level	Expanded coverage and quality of innovative, cost-effective water supply techniques and services in most vulnerable target communities to increase resilience to climate change.	<ul style="list-style-type: none"> - X number of water collection / harvesting systems - X number of waste water reuse facilities - X number of water saving technologies introduced 	Lebanon, Jordan	7,1 million
4. Improvement of policies and plans and knowledge management	Improved policies and plans to increase urban resilience (in the region) with specific focus on water challenges.	<ul style="list-style-type: none"> - 'Regional' DPs and climate change management and monitoring approach and model for (type 2) cities, to feed into 3RP programming - Mainstreaming of gender and climate change considerations in DPs-related policies and strategies - Mainstreaming of gender considerations and the interest of vulnerable group (migrants) in climate change policies and strategies - Lessons learned collected and shared regionally 	Lebanon, Jordan (and other countries in the region)	1 million
5. Total components				11,677.420
6. Project/Programme Execution cost				1,225.806
7. Total Project/Programme Cost				12,903,226
8. Project/Programme Cycle Management Fee charged by the Implementing Entity				1,096,774
Amount of Financing Requested				14,000,000

Project Duration: 4 years

PART II: PROJECT / PROGRAMME JUSTIFICATION

Project components and the regional and innovative approach

As mentioned above, there is a need for better and more effective regional, national and local programming focused on addressing water challenges in 'host' cities exacerbated by both the influx

of DPs and climate change impacts. There is an opportunity to do this in the region (i.e. Lebanon and Jordan, but also Turkey, Iraq and Egypt) through an existing single planning and resource framework called 3RP (i.e. Regional, Refugee and Resilience Plan 2018-2019). This project will work with ministries in Lebanon and Jordan responsible for 3RP coordination, other 3RP partners and ministries responsible for climate change and water resources, to develop an integrated development approach focused on addressing water challenges in cities, exacerbated by both the influx of DPs and climate change impacts. Apart from the WASH sector, the project will also foster cooperation between Jordan and Lebanon in other sectors of the 3RP through enhancing coordination between the relevant ministries. This will be done through the development of a 'regional' DPs and climate change management and monitoring approach and model for (type 2) cities (by understanding drivers, pressures, impacts and responses) (component 1) and by sharing good and innovative practices (component 4), including the use of innovative techniques for water harvesting and waste water reuse (component 3) through community and vulnerable groups involvement (component 2), which are priorities in both Jordan and Lebanon (and in the region). Component 2 on citizen engagement and livelihoods support targets increased adaptive capacity and resilience and reduced vulnerability of DPs to climate change. The platform will be open to everyone and mechanisms will be put in place for equal access and benefits of different groups (DPs, host community members, women, youth, etc.) and to express needs and concerns and to plan interventions. Additional to online platforms and mobile phone applications (if possible), the platform will be a physical place where both DPs and host community members are welcome and exchange ideas and concerns. The focus of the platforms will be on resilience building in an urban context with a focus on water challenges. Moreover, an emergency action plan for urban drought management will be developed and linked to a regional drought early warning system (component 1). Climatic data in Jordan and Lebanon is available, sufficient and provided on a regular basis. Jordan's and Lebanon's Third National Communications on Climate Change Report submitted to The United Nations Framework Convention on Climate Change (UNFCCC), include climatic trends and climate change projections. The addressed climate variables include temperature, precipitation, drought, humidity and GHG emissions. This data was used to support the project concept and the project rationale is evidence-based. The project has consulted regional and national plans and strategies as shown in the section below to ensure that the activities are well aligned with regional and national priorities. The project will also address data gaps wherever needed- especially at the city level- through stakeholder consultations with the national authorities involved.

All the project activities will be carried out in both countries and the funding will be equal as the project targets the same number of direct beneficiaries in both countries. Efforts of the different regional and national committees working on these issues will be consolidated and integrated into one emergency plan.⁴⁸ The project will monitor the trends of influx of Syrian DPs into the target areas and the patterns of them returning home to continue adapting the approach and interventions of the project accordingly within the framework of the approved project document.

The regional approach will support cost-effectiveness through the development of a regional approach (versus smaller, not connected plans) and through the development and sharing of cost-effective and innovative techniques, which will benefit communities and vulnerable groups in the region. Under component 1, the regional emergency action plan for urban drought management is innovative in a way that it assesses adaptation needs and provides adaptation options to water scarcity both at the regional and national levels specifically for urban areas, taking into account changes in climate change and water needs in cities due to influx of DPs. The urban land use strategies for target cities would be innovative decision-making tools for municipal governments (but also national government) to plan cities for future climate change impacts and influx of people in an integrated manner (that allows for coordinated investment in infrastructure and services.. Under component 2, initiating

⁴⁸ Lebanon Environmental Assessment of the Syrian Conflict & Priority Interventions, page 67

community-level platforms for social exchange is an innovative way of exchanging views between DPs and hosting community members to express and discuss needs and concerns and to avoid potential tension related to resilience building of communities, especially if it comes to scarce resources such as water. Especially women and youth groups will be encouraged to participate in this exchange and planning process. Moreover, it will give DPs and host community members a sense of ownership for the project. Under component 3, the project will use internationally proven state of the art technologies that are innovative yet cost-efficient for water harvesting and waste water reuse at community / household level that have not been used properly in both countries. This will be elaborated in the concept note phase. The cost to provide water per person in a sustainable way is estimated around 50 USD. Under component 4, the integration between the regional DPs and climate change management and “continuous” monitoring approach for (type 2) cities and 3RP programming is innovative and provides synergy between climate and DPs action.

Consistency with (inter)national strategies

Internationally, the project aligns with international development agenda 2030 (especially SDGs: 5, 6, 9, 11, 13), the Paris Agreement (COP21) and COPs after; the New Urban Agenda and the 3RP (regionally). In Jordan, the project aligns with 1) national climate change strategies (Jordan INDC – especially residential water supply measures;⁴⁹ Jordan 3rd national communication on climate change (2014) – especially adaptation in water sector (rainwater harvesting and wastewater treatment)⁵⁰ and in urban areas (land use planning);⁵¹ Jordan NAP – especially reduced total water availability; Jordan National climate change policy (2013-2020), 2) national development strategies (Jordan 2025 economic blue print – extreme poverty rate and Jordan economic growth plan 2018-2022 – electricity and water – alignment with focus on investments that can reduce the external vulnerability of the country such as renewable energy and water capture/efficiency programs) and 3) sectoral strategies (Jordan National Water Strategy 2016-2025 – especially Water Management for Climate Change Adaptation.⁵² And Jordan land use project (2007). In Lebanon the project also aligns with 1) national climate change strategies (Lebanon INDC – especially improving water security.⁵³ The INDC states that climate change is one of many challenges to national development, besides population growth, rapid urbanization and geopolitical location and addressing these should be pursued simultaneously;⁵⁴ Lebanon 3rd national communication on climate change (2016) – especially adaptation in water sector (rainwater harvesting, wastewater reuse, water monitoring and refugees’ crisis);⁵⁵ Lebanon NAP with territorial/ city level perspective (forthcoming) – with focus on water, 2) national development strategies National Physical master Plan (2005) and 3) sectoral strategies (Lebanon National water sector strategy (2012) – especially water supply / conservation and wastewater treatment; Lebanon crisis response 2017-2020 – especially safe water for drinking and domestic use with reduced health and environmental impact from unsafe wastewater management for refugees.⁵⁶ During the concept note development phase, consistency with sub-national strategies will be elaborated upon.

Learning and knowledge management

The project will capture and disseminate lessons related to use and implementation of innovative low-cost city- and community-level water harvesting and water reuse techniques and management of cities considering high influx of DPs and climate change impacts. Where possible, lessons will be integrated in 3RP programme plans, UN-ESCWA’s SDGs platform, RICCAR, ACWUA, Arab Centre on Climate Change Studies, the State of the Environment Reports in Lebanon and Jordan in addition

⁴⁹ Jordan INDC page 12

⁵⁰ Jordan 3rd National communication on climate change page 147

⁵¹ Idem page 183

⁵² Jordan national water strategy 2016-2025 page 47

⁵³ Lebanon INDC page 4

⁵⁴ Idem page 3

⁵⁵ Lebanon 3rd National communication on climate change page 149

⁵⁶ Lebanon crisis response plan 2017-2020, 2017, page 163

to reporting to UNFCCC (National Communications, NDCs, etc.). Lessons would also be very relevant to include in regional assessments (e.g. UN Environment's Global Environment Outlook). Moreover, project outcomes can be showcased by Jordan and Lebanon governments at major climate change events (such as the COP and Cities and Climate Change conferences). During the concept note development phase, information on specific knowledge products will be provided.

Consultative process

For the pre-concept note, meetings were held with AF focal points and different ministries focal points to align with national priorities. For the concept note stage, consultations in both Lebanon and Jordan will be held with National and local governments, UN agencies, NGO's, local communities and vulnerable groups and other relevant stakeholders to identify vulnerabilities, needs and priorities. For the full proposal, consultations will focus on identifying and selecting the specific interventions needed with communities and vulnerable groups based on adaptation benefits, cost effectiveness, feasibility and environmental and social impacts and risks, especially for the most vulnerable groups (DPs, women, youth, elderly, disabled people, indigenous groups, etc.).

Sustainability of the project

The project will be sustained by the strong linkage to national priorities (i.e. national buy-in), by mainstreaming outcomes into (inter)national and city-level strategies and their monitoring framework and through the engagement of local affected communities in planning, maintenance, monitoring and training activities. Alignment with regional plans and strategies, such as the 3RP and the Arab Strategy for Water Security, continued cooperation on the issues addressed through this project after it comes to an end is guaranteed. It is also sustained through the involvement and capacity building of national and municipal governments, local communities and vulnerable groups (e.g. skills development) and other stakeholders during the processes and through development of knowledge products and sharing of lessons. The process of monitoring the trends of influx of Syrian DPs into the target areas and the patterns of them returning home will continue to identify if the pressure on water resources is growing or declining. This is part of the continuous learning principle that will be established throughout the project in order to ensure that the objectives are achieved and to feed into future projects at the local and national levels in both countries. The learning products will be shared as mentioned in the "Learning and Knowledge Management Section" on the global, regional and national levels. As for the concrete interventions, management and maintenance arrangements will be identified at the concept note development phase including guidelines to maintain water harvesting and waste water treatment equipments.

Economic, social and environmental benefits

The project will address water challenges at the local level for the groups most in need, which in turn will reduce health risks and enhance food security and livelihood opportunities (through skill building). The urban management and planning approach and community involvement will contribute to reducing city- and community-level climate change risks and potential social unrest between DPs and host communities. At the (inter)national level, lessons can be used to apply low-cost innovative water harvesting and water reuse techniques and city management and planning approaches considering high influx of DPs and climate change impacts, which will contribute to reducing country-level vulnerabilities. During the concept note phase, benefits per activity will be elaborated upon.

Compliance to national technical standards

The project will fully align with national technical standards, including standards for environmental and social impacts, land use planning, drought early warning systems, water supply / harvesting / reuse, etc. If environmental and social impacts are required for proposed interventions, this will be done during the full project development phase. During the concept note development phase, compliance procedures and information about authorizing offices will be elaborated upon.

Duplication with other funding sources

The project will avoid overlap with other projects and use lessons learned where possible. During the concept note development phase, all projects and their lessons learned, complimentary potential and non-duplication will be mapped. At this stage, government officials at the ministry and municipality level confirmed there is no overlap, such as with a rehabilitation of Jordan Badia project in Mafrq.

Justification for funding requested

The project will support implementation of national priorities as well as responding to local needs, especially of the most vulnerable, and will provide added value to national plans and approaches through implementation of innovative and low-cost technical interventions. There is a need for concrete adaptation interventions for the water sector in the targeted cities in Jordan and Lebanon focusing on the most vulnerable groups. The interventions are crucial for the cities to cope with current and future climate change impacts exacerbated by influx of Syrian DPs. The Third National Communications to the UNFCCC of Jordan and Lebanon stated clearly that financial constraints are among the barriers to adaptation and that there is a clear need for funding to support national and municipal climate action. As mentioned earlier, the target cities were selected because of a combination of existing and projected climate change-related water challenges, high pressure on water resources due to high influx of DPs and lacking resources and capacities to address these climate change-related water issues and specific needs of DPs, which includes access to affordable water.

From a regional perspective, the programme will support the 3RP regional and national programming, for which budget gaps exist for the development of an integrated regional approach focused on addressing especially WASH and social cohesion and livelihoods issues,⁵⁷ in 'host' cities exacerbated by both the influx of DPs and climate change impacts.

The environmental and social impacts and risks identified

The proposed project seeks to fully align with the Adaptation Fund's Environmental and Social Policy (ESP) and Gender Policy (GP). For the concept note, the entire project and all project components and activities will be screened to identify potential environmental and social risks and impacts using the 15 Adaptation Fund Principles. A gender approach / baseline will also be developed, with a focus on DPs, women and youth. For the potential risks and impacts identified, mitigation measures will be proposed to reduce risks to manageable levels. For the full proposal, an ESMP will be developed, which will include management and monitoring arrangements for dealing with potential risks. With the information available at this stage, the project is expected to fall into medium risk category B because interventions (water harvesting and water reuse interventions will be implemented at the community level – thus will be small and localised. Information required to further assess this classification, also for each intervention / activity, will be provided at the concept stage. This information will include detailed information per intervention / activity so that these can be regarded as Identified sub-projects.

PART III: IMPLEMENTATION ARRANGEMENTS

UN Habitat will be the implementing entity for the project providing specific technical support in urban development and resilience related areas. With support from the Regional Office for Arab

⁵⁷ 3RP Regional Quarterly Dashboards March 2018. Online: <https://data2.unhcr.org/fr/documents/download/63820>

States (ROAS), UN-Habitat country offices in Jordan and Lebanon will facilitate the coordination between the government entities. In Jordan and Lebanon, national executing entities will be the ministries responsible for climate change, water resources and DPs:

Lebanon: Ministry of Environment; Ministry of Energy and Water; Ministry of Social affairs;
Jordan: Ministry of Environment, Ministry of Water and Irrigation; Ministry of Planning and International Cooperation, of which the last is a National Implementing Entity.

At the city level, partners will be municipal line departments in target cities. For the execution of community-level concrete interventions and community involvement, local partners will be identified during the concept note phase. There will be coordination between municipal authorities in both countries on technical issues (e.g. spatial planning) and communication of lessons learned during implementation.

The two countries are already under a number of common frameworks by the League of Arab States such as the Arab Strategy for Water Security and the Arab Strategy for Housing and Sustainable Urban Development 2030. On DPs specifically, Jordan and Lebanon are already cooperating under the 3RP framework. This ensures that the coordination of the project will be continuous, efficient and sustainable.

PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

- A. Record of endorsement on behalf of the government⁵⁸** *Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project/programme. Add more lines as necessary. The endorsement letters should be attached as annexes to the project/programme proposal.*

<i>Nayef Hmeidi Al-Fayez, Secretary general, Ministry of Environment, Jordan</i>	<i>Date: August 5, 2018</i>
<i>Tarek El Khatib, Ministry of Environment, Lebanon</i>	<i>Date: August 6, 2018</i>

Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.



Ministry of Environment

Ref.No 7.2.7793
Date 5-8-2018

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for "*Increasing the resilience of displaced persons (DPs) to climate change-related water challenges in urban host settlements*"

In my capacity as designated authority for the Adaptation Fund in Jordan, I confirm that the above regional project proposal is in accordance with the government's National Adaptation Plan including the priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the country. It is also well aligned with Jordan's Climate Change Policy and Intended Nationally Determined Contribution (INDC). The regional approach shall also enhance management of water challenges and pressure on resources regionally and foster our cooperation with Lebanon under the Regional Refugee and Resilience Plan 2018-2019.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by UN-Habitat and executed by the relevant local executing entities.

Sincerely,

Minister of Environment


Nayef Hmeidi Al-Fayez

Eng. Ahmad Al-Qatareh
Secretary General



REPUBLIC OF LEBANON
MINISTRY OF ENVIRONMENT

Beirut, 06/08/2018
Our Ref: 4206/B

The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for project: Increasing the resilience of displaced persons to climate change related water challenges in urban host settlements

In my capacity as designated authority for the Adaptation Fund in Lebanon, I confirm that the above national project/programme proposal is in accordance with the government's national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Lebanon.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme proposal will be implemented by the UN Habitat and executed by the Ministry of Environment.

Sincerely yours,



Tarek El Khatib
Minister of Environment

AA-F-16-V-1-1/1

Cc:

- Mrs. Nancy Khoury, Acting Head, Department of Public Relations & External Affairs, MoE
- Mrs. Samar Malek, UNFCCC Focal Point, Service of Environmental Technology

A. Implementing Entity certification

<p>I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans, including Jordan INDC, NAP, National climate change policy, Jordan 2025 economic blue print, Lebanon INDC, NAP, TNC, Lebanon 2025 and the regional 3RP, subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.</p>	
<p><i>for</i> Rafael Tuts Director, Programme Division UN-Habitat</p>  <p>Signature DIE</p>	
Date: 06-August-2018	Tel. and email: +25420762-3726 raf.tuts@un.org
Project Contact Person: Tarek Abdel Monem	
Tel. And Email: +20237618812 tarek.abdel-monem@un.org	

Annex 1: Overview of needs / approach:⁵⁹

- **Moving from emergency approaches to more development-oriented, medium-to-long term approaches is pivotal.** Emergency approaches to displacement and natural disasters and climate change are necessary but insufficient. The protracted nature of displacement and climate change, and the fact that host areas and communities often face similar challenges in terms of living conditions and opportunities, require medium-term solutions that target both the displaced and the host communities.
- **Urban displacement and climate change and their associated trends and impacts need to be integrated into urban planning and policies.** Forced displacement and climate change are increasingly important factor driving urban growth trends. Taking into account the scale, scope and impacts of displacement and climate change in the existing urban planning and policies will help local governments respond to the challenge effectively.
- **Managing urban growth is beneficial in the long run.** Large influxes of refugees often lead to sub-optimal patterns of urban growth that will determine long-term urban resilience and sustainability of cities, since housing, street, and public spaces are not easily changed once established.
- **Urban service provision is extremely critical for improved living conditions and building trust with local authorities.** Local governments should invest in urban services, considering most cities in Mashreq are already suffering from inadequate service provision. Displacement and climate change exacerbate the situation by adding extra pressure on services, often becoming a source of tension with discontent and competition around services.
- **Promoting social cohesion is crucial for sustaining positive development outcomes.** Rising social tensions between host communities and refugees, and among the displaced, pose risks and threats to development gains. Therefore, inclusive approaches that promote social cohesion should be integral part of displacement responses.
- **Urban resilience provides a comprehensive response framework.** Although there is little exploration of how urban systems respond to a rapid influx of new and often long-term residents by conflict and climate change, it is manifest and critical to build resilient communities and institutions that are equipped to respond to shocks and stresses arising from displacement.

⁵⁹ World Bank et al (2017, p21, policy note September 14): Refugees in the middle east. Bringing an urban lens to the forced displacement challenge.

Annex 2: Climate change adaptation interventions to be considered (and a selection to be made):

Residential water supply:

- Introduction of water saving technologies such as low-flow toilets and showers and efficient appliances.⁶⁰
- Collection of rainwater for gardens, toilets, and other applications⁶¹ and storage dams and hill lakes.⁶²

(Urban) agriculture:

- Irrigation efficiency, e.g. through water saving technologies⁶³
- Using groundwater more efficiently⁶⁴
- Reuse of treated wastewater⁶⁵
- Rainwater harvesting⁶⁶

Possible institutional / planning adaptation activities:

- Increased water metering⁶⁷
- Reform of water pricing
- Promotion of water saving through awareness campaigns⁶⁸
- Developing river protection and sanitation zones⁶⁹
- Urban ecosystem management / protection to increase water supply.
- Introducing policy measures to ensure the equity in access to water⁷⁰
- Integrating gender considerations and the interest of vulnerable group in climate change policies and strategies.⁷¹

Possible concrete interventions when in border areas:

- Activities concerning water quality, e.g. groundwater protection (technical innovation)
- Reuse of treated wastewater (for green spaces) (technical innovation)
- Improvement of water quality, e.g. water treatment (technical innovation)

⁶⁰ In line with Jordan INDC, page 12 and in line with Lebanon INDC, page 4 and Jordan economic growth plan 2018-2022, page 14 and 52-55

⁶¹ In line with Jordan INDC, page 12

⁶² In line with Lebanon INDC, page 4 and Jordan economic growth plan 2018-2022, page 14 and 52-55

⁶³ In line with Jordan INDC, page 12 and Jordan economic growth plan 2018-2022, page 14 and 52-55

⁶⁴ In line with Jordan INDC, page 12 and in line with Lebanon INDC, page 4 and Jordan economic growth plan 2018-2022, page 14 and 52-55

⁶⁵ In line with Jordan INDC, page 12 and in line with Lebanon INDC, page 4 and Jordan economic growth plan 2018-2022, page 14 and 52-55

⁶⁶ In line with Jordan INDC, page 12 and Jordan economic growth plan 2018-2022, page 14 and 52-55

⁶⁷ In line with Jordan INDC, page 12 in line with Lebanon INDC, page 4

⁶⁸ In line with Jordan INDC, page 12

⁶⁹ In line with Jordan INDC, page 12

⁷⁰ In line with Jordan INDC, page 12

⁷¹ In line with Jordan INDC, page 17