

Economic and Social Commission for Western Asia

# International Financial Flows for Climate Change Adaptation in the Region

Mashreq Waters Knowledge Series  
Workshop on Economic Implications of Climate Change and Water Scarcity in the Mashreq Region  
1-3 December 2020

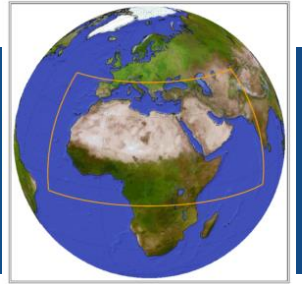


Shared Prosperity **Dignified Life**



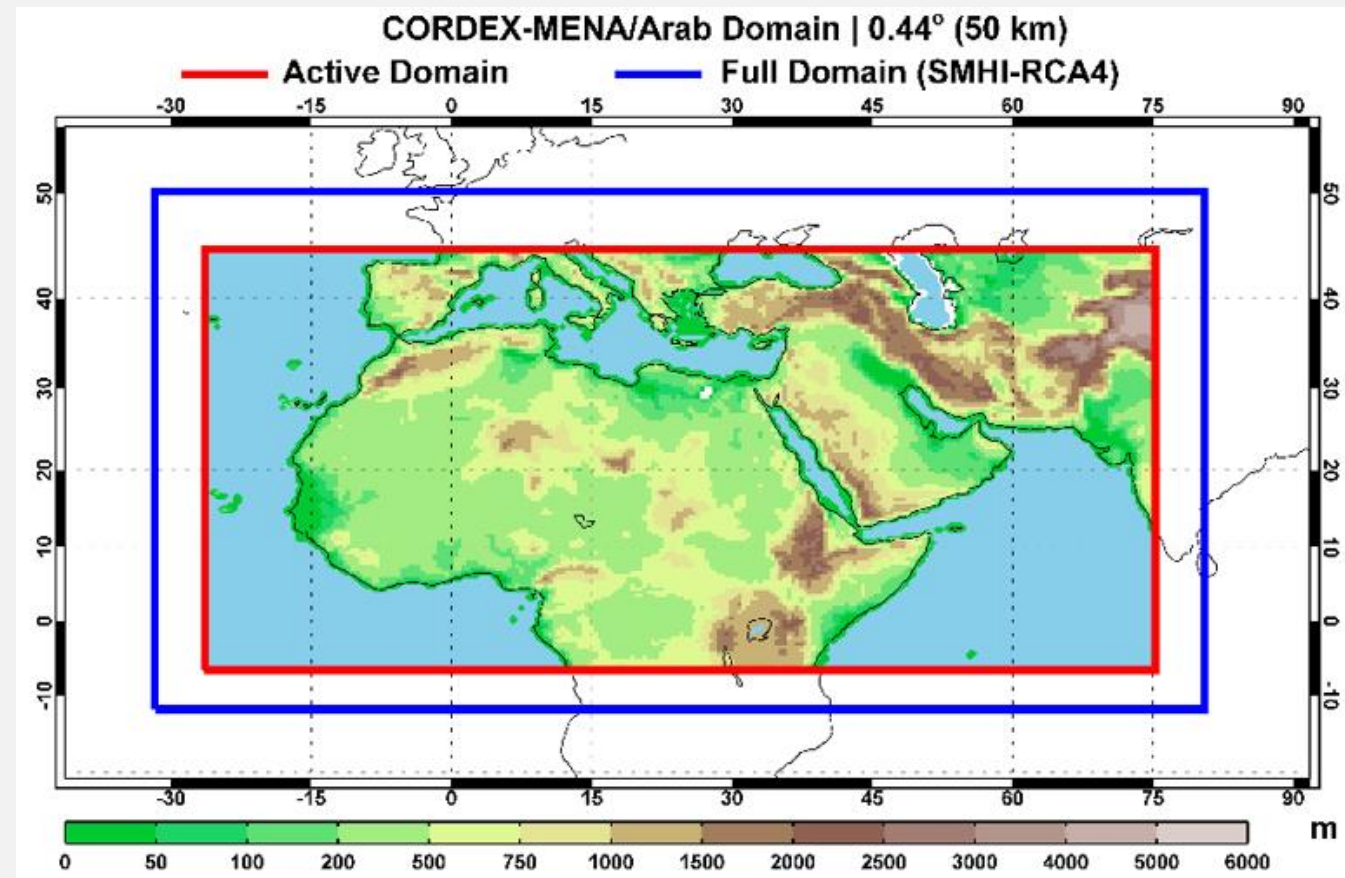
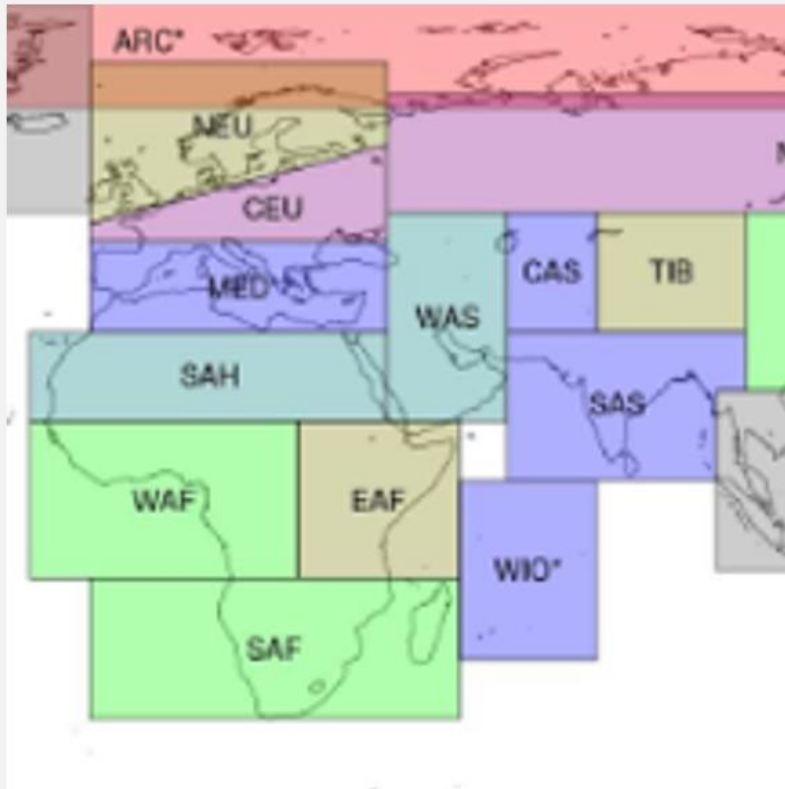
Carol Chouchani Cherfane  
Chief, Water Resources Section  
Climate Change & Natural Resource  
Sustainability Cluster  
ESCWA  
Beirut, Lebanon

# Science-Policy Interface



CORDEX MENA Domain  
Region 13

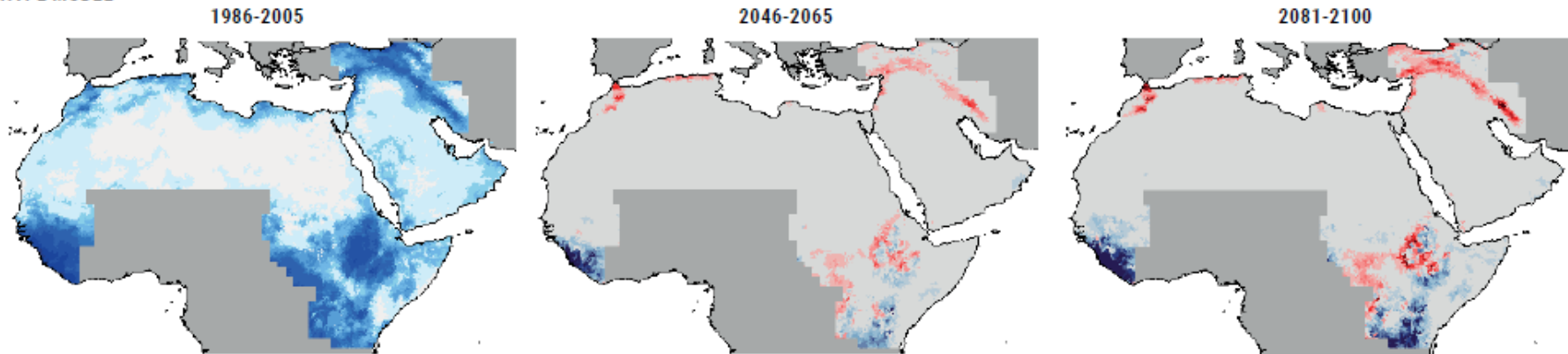
Spatial boundaries of the geographical reference regions used in the IPCC 5th Assessment Report (AR5)



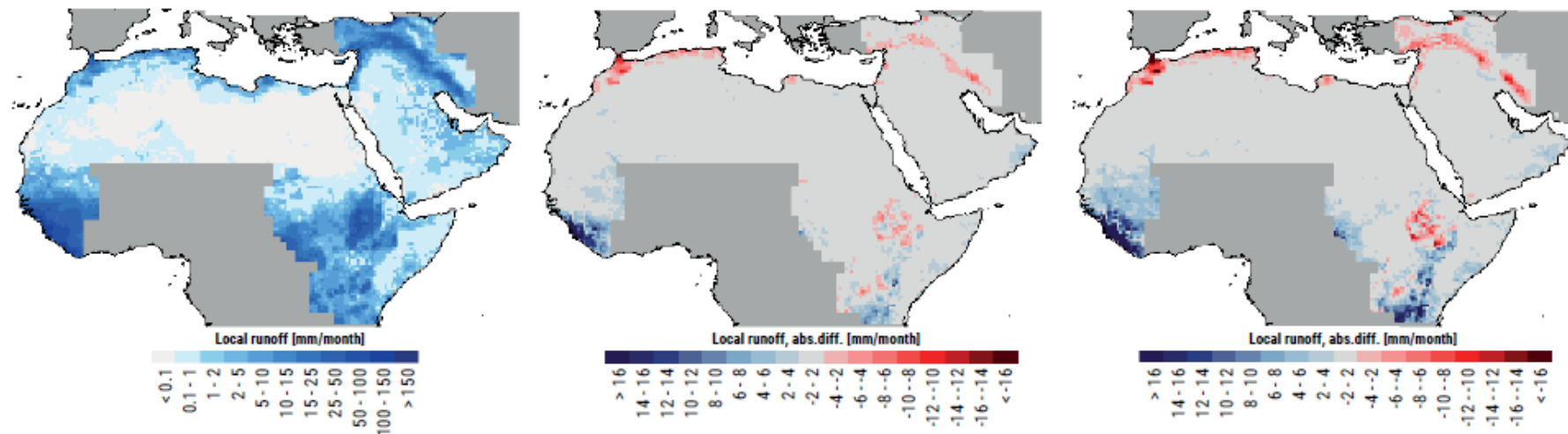
# Mean Change in Annual Runoff for RCP 8.5

RCP 8.5

HYPE MODEL



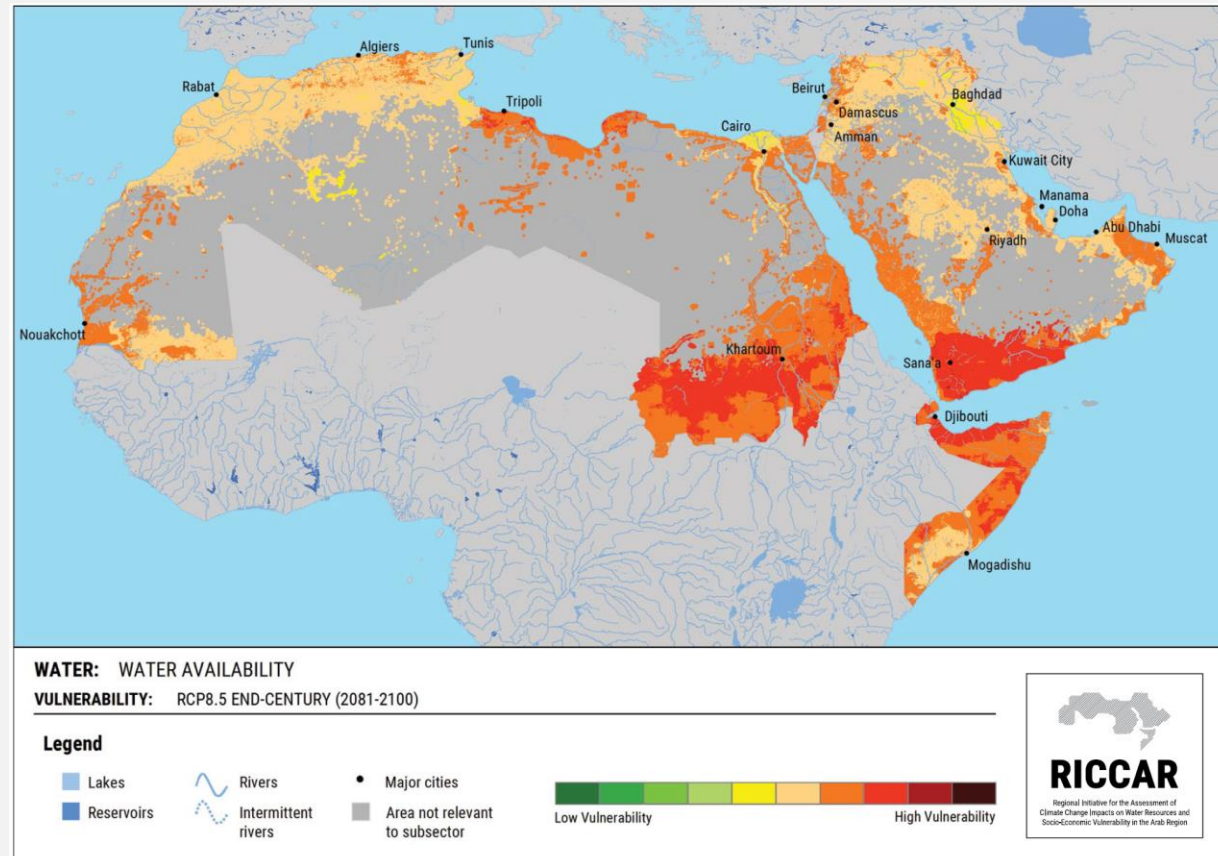
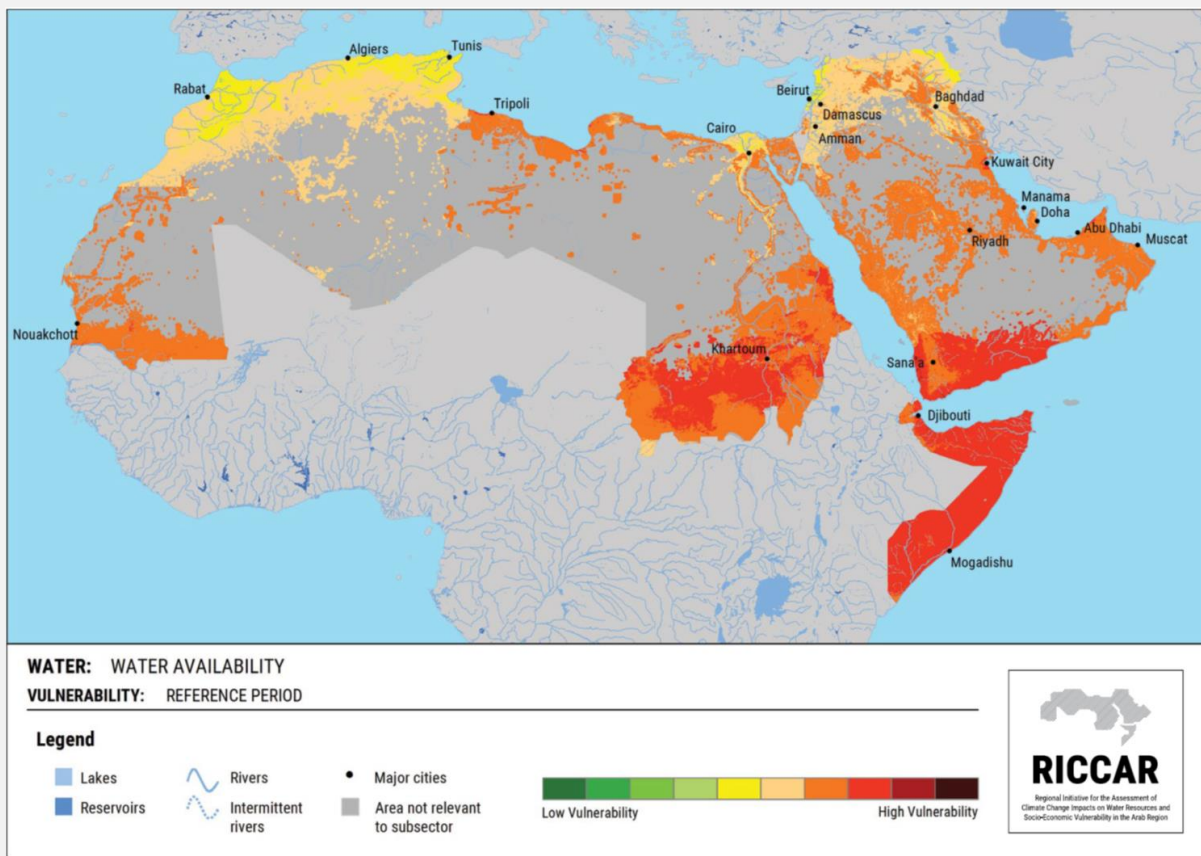
VIC MODEL





# Science informing Policy, Plans and Projects

## Change in Water Availability Vulnerability



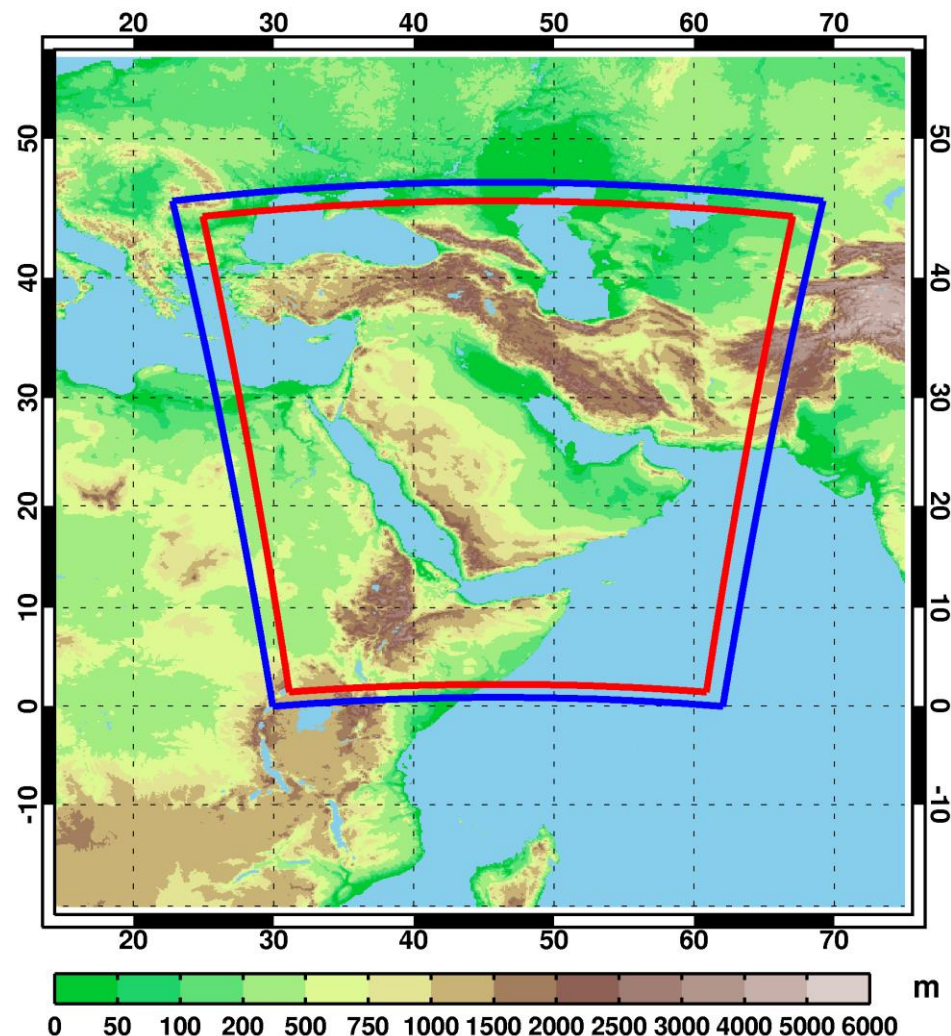
## Reference & End-Century periods for RCP 8.5

# Mashreq Domain

RICCAR Mashreq Domain | 10km | MSH-10

HCLIM-ALADIN (SMHI)

— Active Domain — Full Domain



- Mashreq projections available in April 2021
- 10 km<sup>2</sup> scale
- RCP 8.5
- ALADIN RCM nested in 6 CMIP6 GCMs
- Historical conditions 1961-2014
- Future climate 2015-2070
- Raw and bias-corrected outputs and ensembles will be openly available via [www.riccar.org](http://www.riccar.org)

**SMHI**



# Global Financial Flows for Climate Action

OECD database on financial flows from 2013-2018 shows financial flows from *developed countries* to *developing countries* reached **\$78.9 billion by 2018**. Finance for:

- **Mitigation represented 70%**, increasing 15%
- **Adaptation represented only 21%**, but increased average of 29% per year
- **Cross-cutting issues represented 9%**

Loans exceeded grants, significantly.

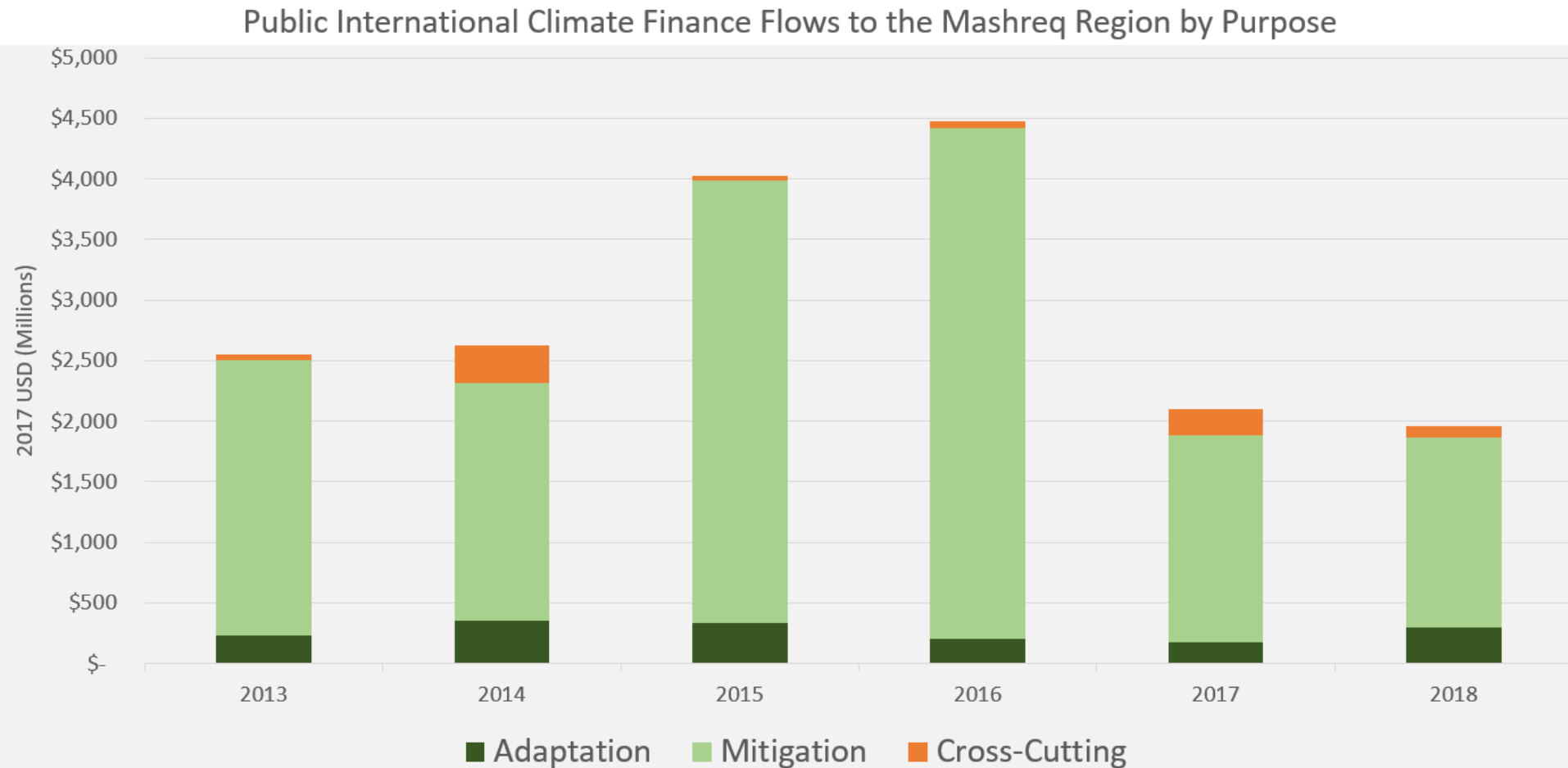
Financial data for 2019 and 2020 is not yet available.



OCED, 2020, *Climate Finance Provided and Mobilised by Developed Countries, 2013-2018*.



# Public Climate Finance to Mashreq is Largely for Mitigation



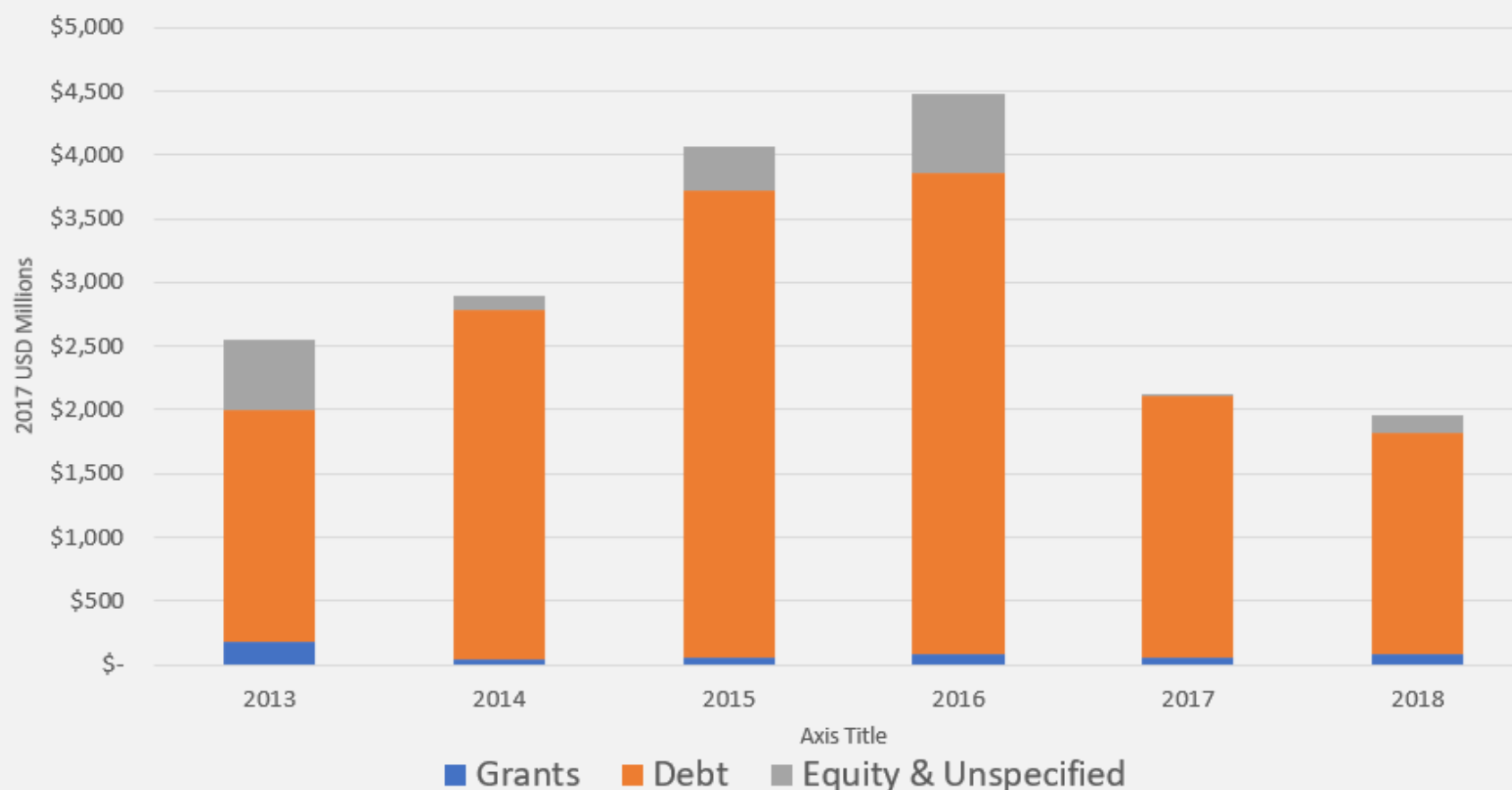
Source: ESCWA Calculations based on OCED, 2020, *Climate Finance Provided and Mobilised by Developed Countries Database, 2013-2018*.

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Mashreq Region for this presentation is comprised of Iraq, Iran, Jordan, Lebanon, Syrian Arab Republic and Turkey

# Public Climate Finance Flows to Mashreq is Largely Debt

Public International Climate Finance Flows to the Mashreq Region by Type



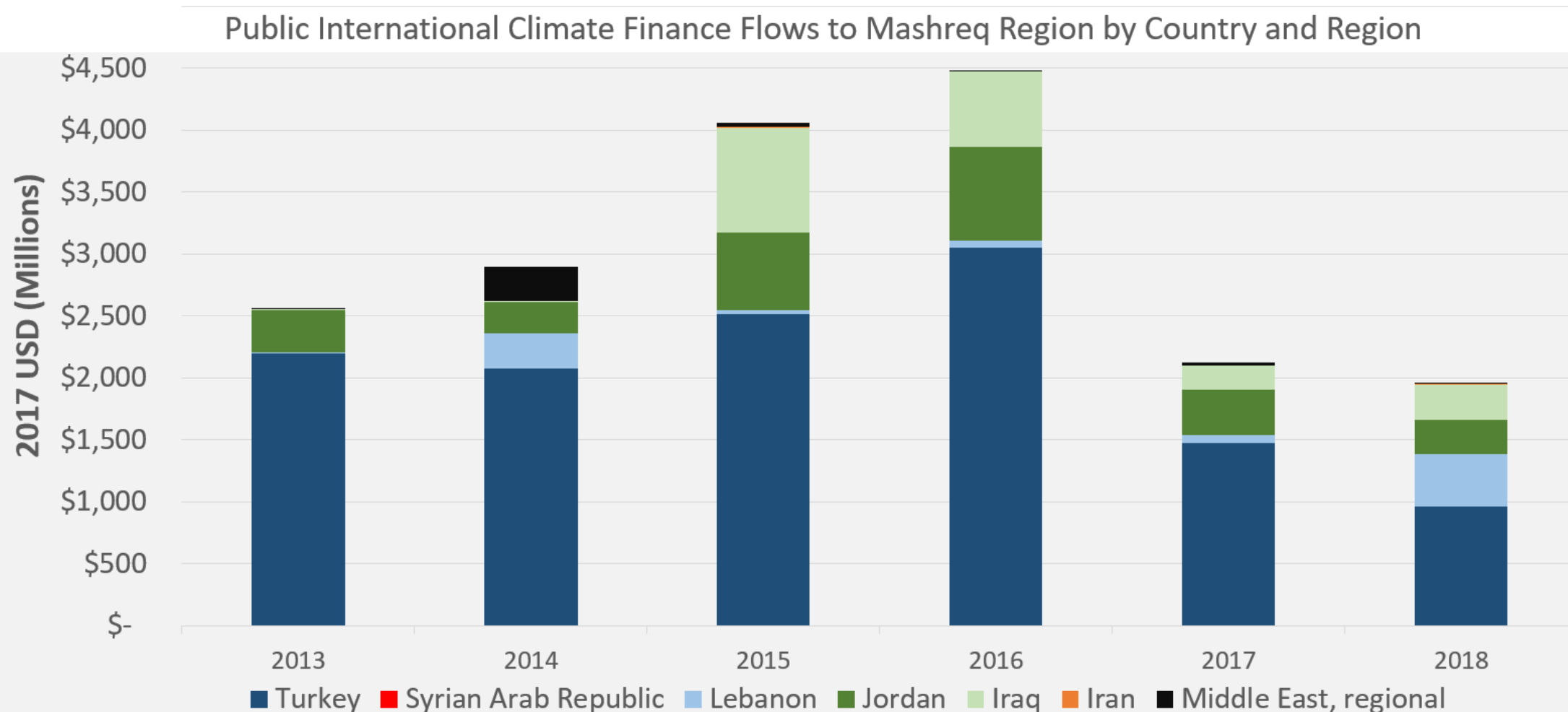
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# Public Climate Finance Flows to Mashreq Decreasing



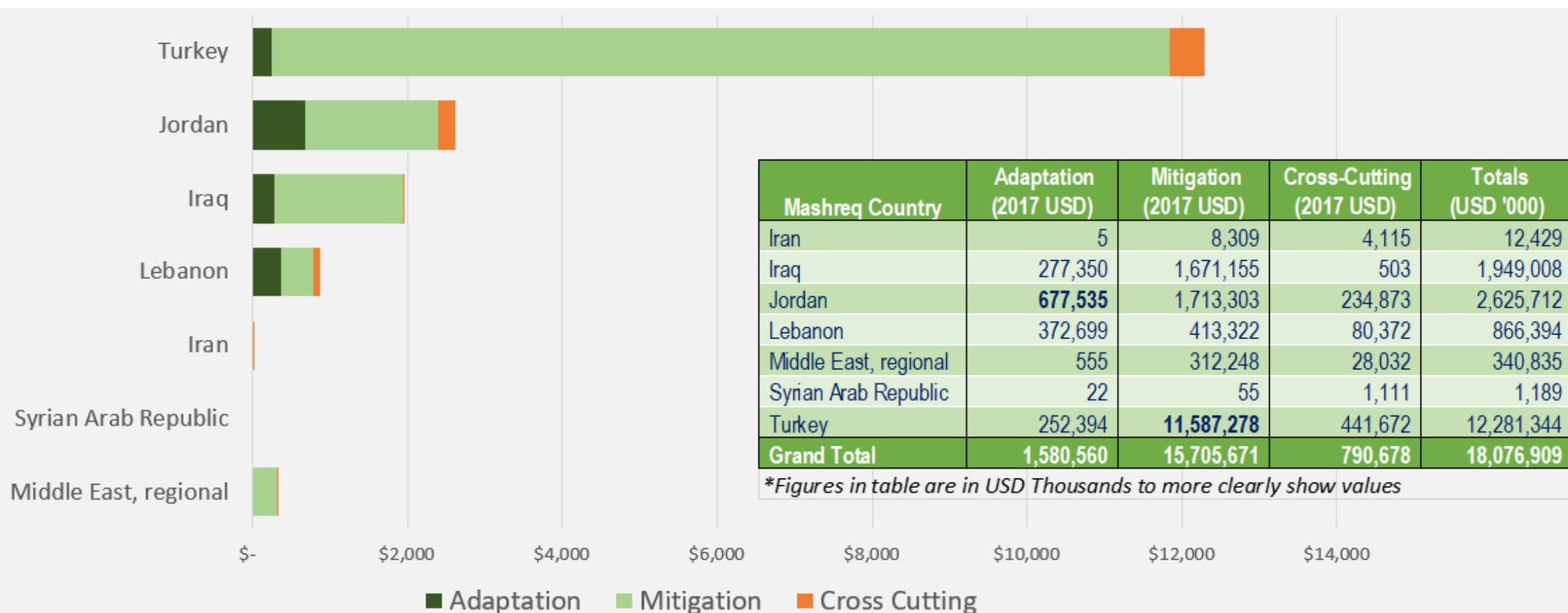
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# Public Climate Financial Flows are Uneven across Mashreq

Public International Climate Finance Flows by Purpose (2013-2018) in 2017 USD Millions



Source: ESCWA Calculations based on OCED, 2020, *Climate Finance Provided and Mobilised by Developed Countries Database, 2013-2018*.

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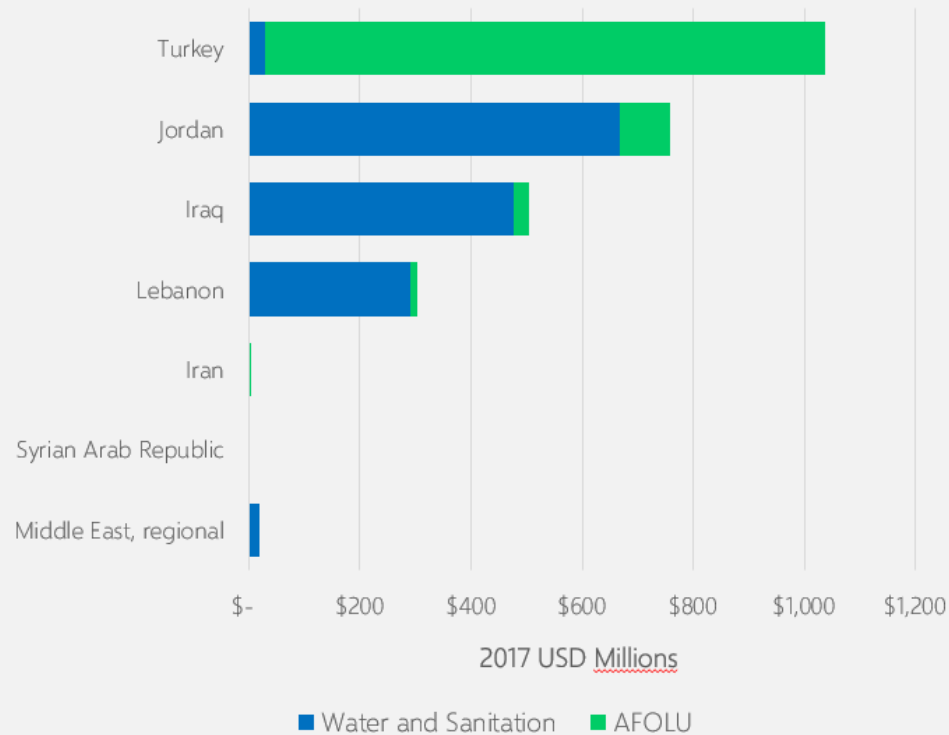
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# WATSAN and AFOLU by Recipient

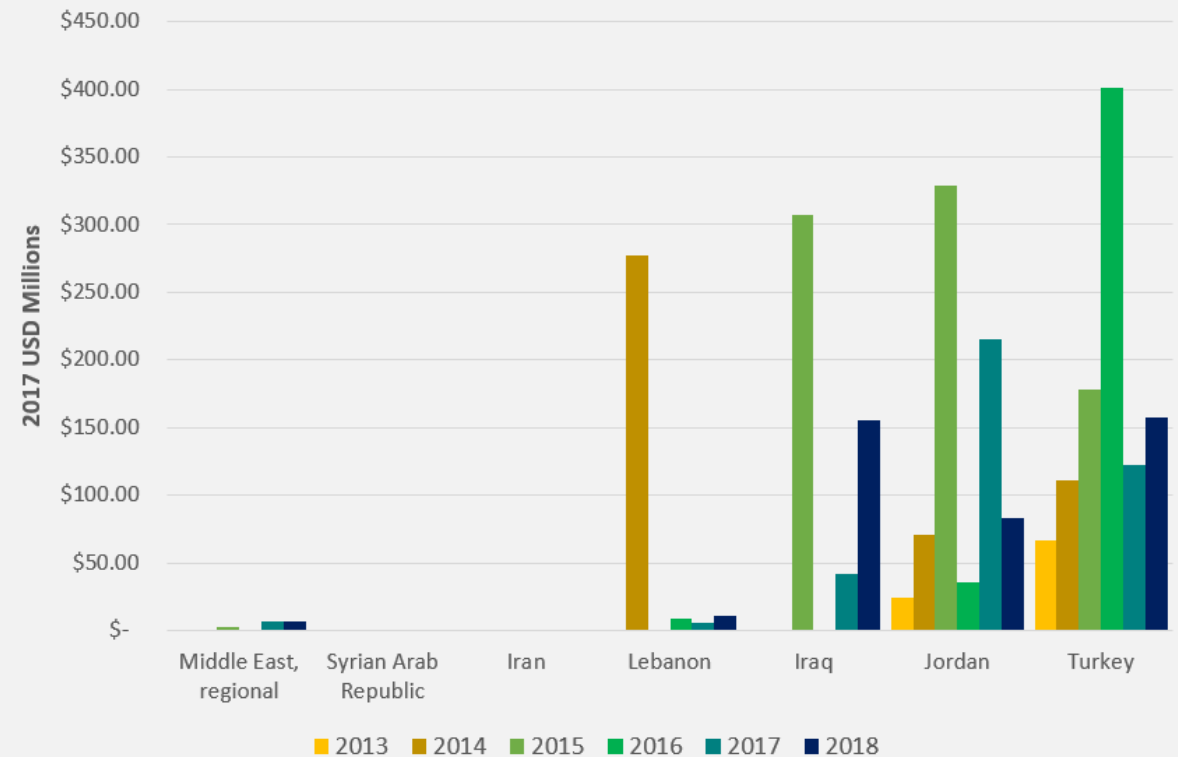
## WATSAN: Water & Sanitation

## AFOLU: Agriculture, Forestry & Other Land Uses

Climate Finance Flows to WATSAN and AFOLU in Selected States (2013-2018)



Climate Finance Flows to WATSAN and AFOLU in Selected States (2013-2018)



Source: ESCWA Calculations based on OCED, 2020, *Climate Finance Provided and Mobilised by Developed Countries Database, 2013-2018*.

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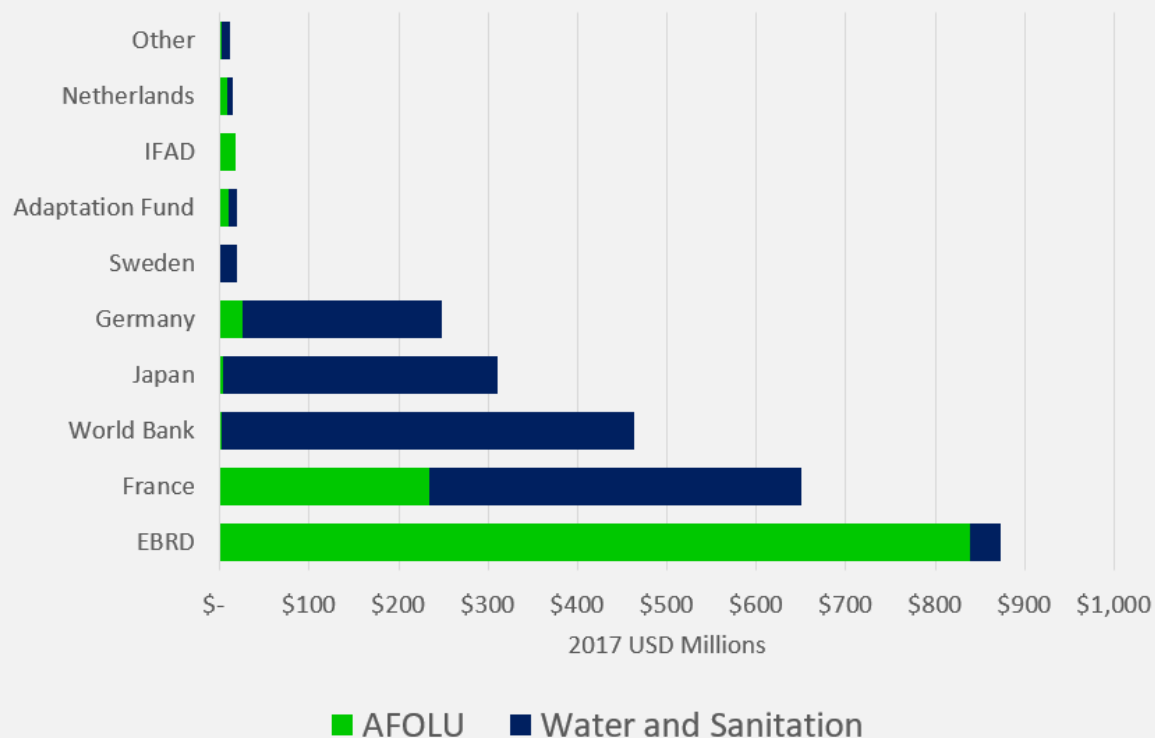
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# Sources of Climate Finance to Mashreq Countries

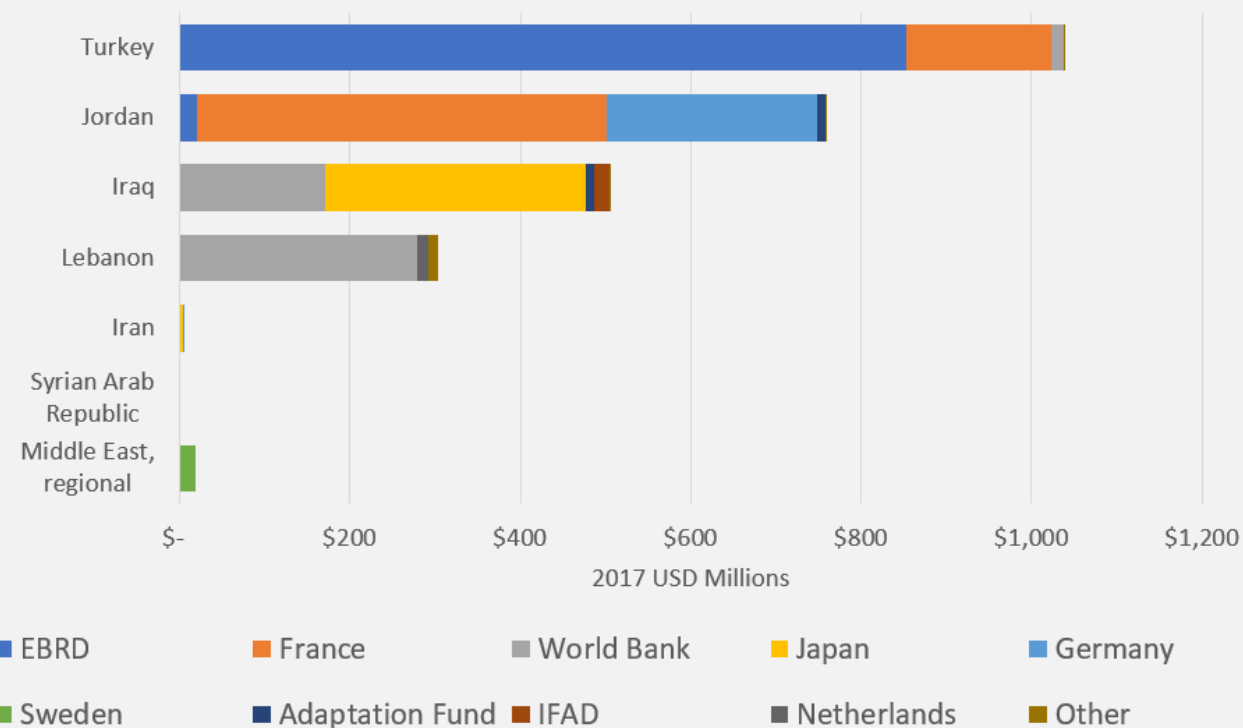
## WATSAN: Water & Sanitation

## AFOLU: Agriculture, Forestry & Other Land Uses

WATSAN and AFOLU Flows to Mashreq Countries by Source (2013-2018)



Public International Climate Finance Flows to WATSAN and AFOLU by Source (2013-2018)



Source: ESCWA Calculations based on OCED, 2020, *Climate Finance Provided and Mobilised by Developed Countries Database, 2013-2018*.

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# Climate Finance Support on Water from Selected Sources

## Multilateral Climate Funds

| Mashreq Country      | GCF Projects   | GCF Readiness <sup>1</sup> | Adaptation Fund | CTCN <sup>2</sup> |
|----------------------|----------------|----------------------------|-----------------|-------------------|
| Iraq                 |                | ✓                          | <sup>6</sup> ✓  |                   |
| Iran                 |                | ✓                          |                 | <sup>9</sup> ✓    |
| Jordan               | <sup>4</sup> ✓ | ✓                          | <sup>7</sup> ✓  |                   |
| Lebanon              | <sup>5</sup>   | ✓                          | <sup>8</sup> ✓  |                   |
| Syrian Arab Republic |                | ✓                          |                 |                   |
| Turkey <sup>3</sup>  |                |                            |                 |                   |

- (1) **All GCF Readiness** projects indicated were approved between 2017 & 2019
- (2) **Iraq, Jordan, Lebanon and Syrian Arab Republic** benefited from CTCN technical assistance, but none of the projects between 2016 and 2020 covered the water sector.
- (3) **Turkey** did not access any of these funds.
- (4) **Jordan** involved in 5 multiple countries projects, including 1 on green cities that includes a component related to water management approved in 2018
- (5) **Lebanon** involved in 2 multiple countries projects on mitigation (only).
- (6) **Iraq** project on Building Resilience of the Agriculture Sector to Climate Change approved in 2018
- (7) **Jordan** AF project on Sustainability of Wastewater Reuse approved in 2015
- (8) **Lebanon** project on Climate Smart Agriculture: Enhancing Adaptive Capacity of the Rural Communities in Lebanon (AgriCAL) approved in 2012
- (9) **Iran** received 5 Climate Technology Centre and Network (CTCN) technical assistance activities between 2014 and 2019, including one that covers the water sector in 2019, e.g., Workshop on Sand and Dust Storms (SDS) Technologies to control dust storms sources with focus on degraded lands, dried up riverbeds and lakes, and plains and agricultural fields.

# Closing Messages

- Open data platforms can help to identify common needs and inform joint assessments
- Climate assessments can inform dialogue, policy and plans
- Plans inform projects that can be used to mobilize climate finance
- Scientific basis and joint assessments can help to direct climate finance towards adaptation, which is underfunded in the Mashreq countries relative to mitigation, and particularly in the water sector.



# Thank you

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ESCWA colleagues Daniel Griswold and Souraya Zein contributed to this presentation