Environmental Change, Conflict and Human Migration in the Mediterranean: Challenges and Open Issues

Manfred A. Lange^{1,2}, Wolfgang Cramer³, Ethemcan Turhan⁴ and Nicolas Jarraud⁵

1) The Cyprus Institute, Nicosia, Cyprus

2) The Future Earth MENA Regional Center at the Cyprus Institute, Cyprus

3) Institut Méditerranéen de Biodiversité et d'Ecologie marine et continentale, CNRS, Aix-Marseille Univ., IRD, Univ. d'Avignon, Aix-en-Provence cedex 04, France

4) University of Groningen, Groningen, The Netherlands

5) The Cyprus Institute, Nicosia, Cyprus







Introduction/Background

- Despite high past numbers, internally displaced persons dominate Mediterranean migration
- Non-EU countries (Jordan, Lebanon, Turkey) host the majority of migrants
- Climate change exposure is one of the factors leading to migration

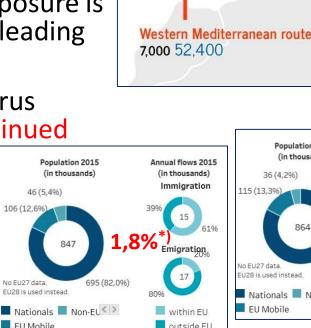
Immigrants to Cyprus underline the continued

high number migrants in the Mediterranean

2015: 15 000

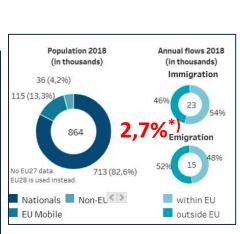
2018: 23 000

2020: 26 000



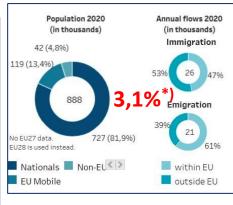
Migrant numbers

numbers in 2015 numbers in 2018



Central Mediterranean route

153,900 22,900



Eastern land route

Eastern Mediterranean route 885,400 52,000

INFO MIGRANTS

1,900 1,000

Western Balkans route 764,000 5,200





46 (5,4%)

106 (12,6%)

EU28 is used instead

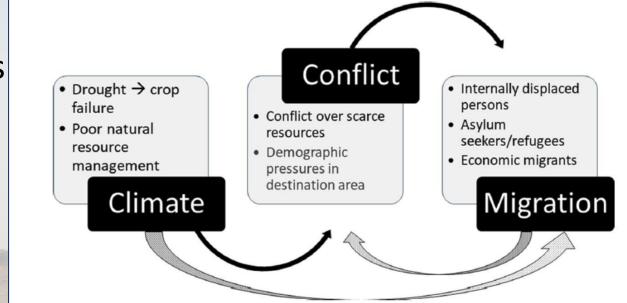
EU Mobile



*)= percentage of total population

Climate Change, Conflicts and Migration

- While there is evidence for a Climate Change-Conflicts-Migration Nexus, there is no simple causal link
- Climate change has (mostly adverse) consequences for water- and food security
- Competition for natural resources
 ⇒ conflicts
- Conflicts ⇒
 internal or cross border migration
- Various interrelationships



Schematic relationships between Climate, Conflicts and Migration; source: Abel et al. (2019)







Climate Change and Human Livelihood¹⁾

- Impacts of climate change likely to undermine human livelihoods (water- and food security)
- Biodiversity loss may pose the most immediate and important threat to human survival
- Reduced agricultural productivity results in severe risks to food security
- This will result in highly elevated food prices that are unaffordable to poor population groups
- This may cause inappropriate coping strategies by threatened communities
- Climate change may also reduce/inhibit human mobility

1) Partly derived from J. Vivekananda (2022), pers. comm.

Source: Future of Life Institute; https://futureoflife.org/2016/07/22/climate-change-is-the-most-urgent-existential-risk/



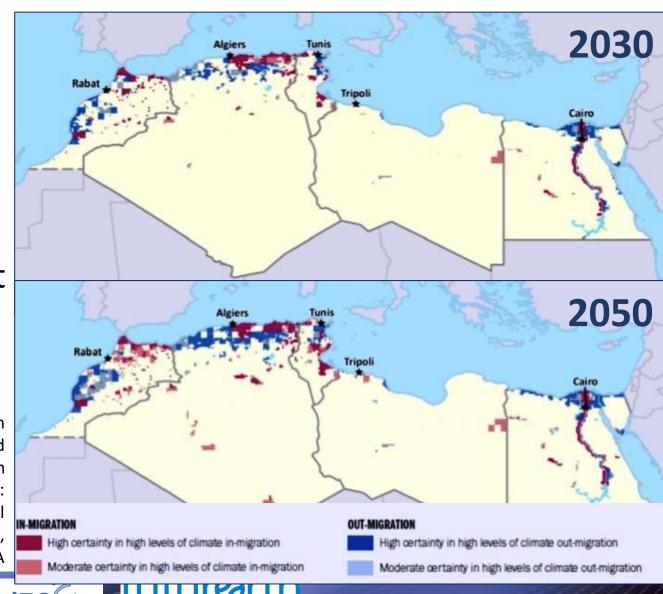




Climate Change, Security Risks and Migration

 The apparent increases in out-migrations from North Africa indicate potentially growing migrant flows to the Mediterranean

Hotspots projected to have high levels of climate in-migration and climate out-migration in North Africa, 2030 and 2050; source: Clement et al. (2021) Groundswell Part 2, World Bank, Washington, DC 20433, USA









Additional Obstacles/Drivers¹⁾

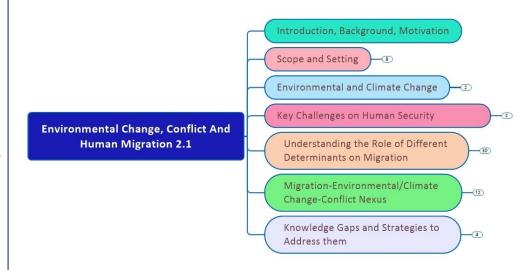
- Weak and ineffective governments and national authorities enhance adverse impacts of climate change
- Extreme events: heat waves, extended droughts, extreme rainfall ⇒ a particular point in case
- Additional (often unintended) risks arise from poorly designed climate and security policies
- Security risks caused by climate change impacts and conflicts related to natural resource scarcity (water) are exaggerated by weak governance mechanisms and insufficient/inappropriate international agreements
- Intentional changes in upstream-downstream allocation of river water and lack of appropriate mutual agreements is likely to lead to extreme risks of conflicts between involved countries
 - 1) Partly derived from J. Vivekananda (2022), pers. comm.





MedECC's Special Report

- The Mediterranean Experts on Environmental and Climate Change (MedECC) currently prepare a Special Report on Environmental Change, Conflict and Human Migration
- Key Points/Issues of the Special report
 - This will be a synthesis report; no new research envisioned
 - We aim to identify key global determinants of migration
 - We also intend to specify regional/local determinants
 - We will shed light on the interactions between determinats on all levels



 We will explore the different perceptions of societal groups, resulting vulnerabilities and their role for triggering human mobility





