



CENTRE OF
MIGRATION
RESEARCH

Natural environment and migrations in the modern world

dr Karolina Sobczak-Szelc

Centre of Migration Research
University of Warsaw



ENVIRONMENTAL MIGRATION - INTRODUCTION



CENTRE OF
MIGRATION
RESEARCH

The most important elements in the current discussion on environmental migrations

- The most important elements in the current discussion on environmental migrations
- What is the definition of an environmental migrant?
- Can the environment be considered as an initial factor?
- Which factors of the natural environment shape what migrations?
- How many people will migrate as a result of changes in the natural environment?
- Who, where and when will migrate?
- Will the migration be permanent or temporary?
- Internal or international?
- What will be the consequences of migration for both those participating in them and those left behind?
- What are the forms of adaptation to changes / limitations of the natural environment?
- Who is responsible for protecting environmental migrants?

Climate change is today one of the main drivers of forced migration, both directly through impact on environment – not allowing people to live any more in the areas where they were traditionally living – and as a trigger of extreme poverty and conflict.

Antonio Guterres UN High Commissioner for Refugees 17 June 2008



CENTRE OF
MIGRATION
RESEARCH

DEFINITIONS



CENTRE OF
MIGRATION
RESEARCH

Definition

Geneva Convention of 1951

"A person who owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it.."

Forced migrants FMO

Environmental and disaster displaced

People displaced as a result of:

- natural disasters (floods, volcanoes, landslides, earthquakes),
- environmental change (deforestation, desertification, land degradation, global warming),
- human-made disasters (industrial accidents, radioactivity).

Sometimes referred to: 'environmental refugees', 'disaster refugees',

Displaced by environmental factors or disasters do not leave the borders of their homeland.

Definition

Environmental migrants [...] are persons or groups of persons who, for compelling reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad. [...]"

(IOM 2011).

Terminology

- environmental refugee,
- environmental migrants,
- environmentally displaced persons,
- environmentally induced population movements,
- environmentally induced migrants,
- environmental emergency migrants,
- environmentally forced migrants,
- environmentally motivated migrants,
- ecological refugees,
- climate migrants i in.

T TYPOLOGY OF ENVIRONMENTAL MIGRATION



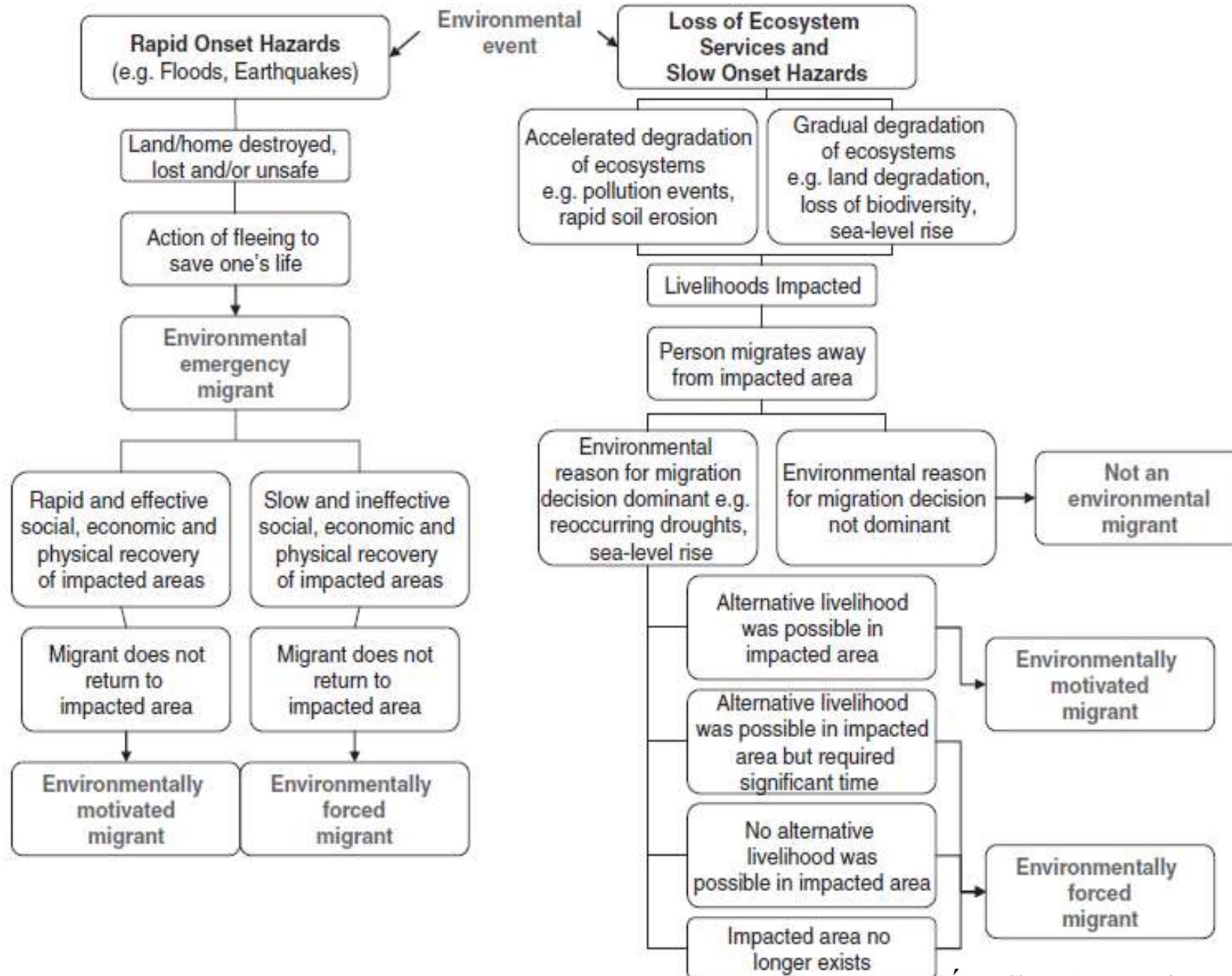
CENTRE OF
MIGRATION
RESEARCH

Types of environmental migrants

- **Environmental emergency migrants**
- **Environmentally forced migrants**
- **Environmentally motivated migrants**



Types of environmental migrants

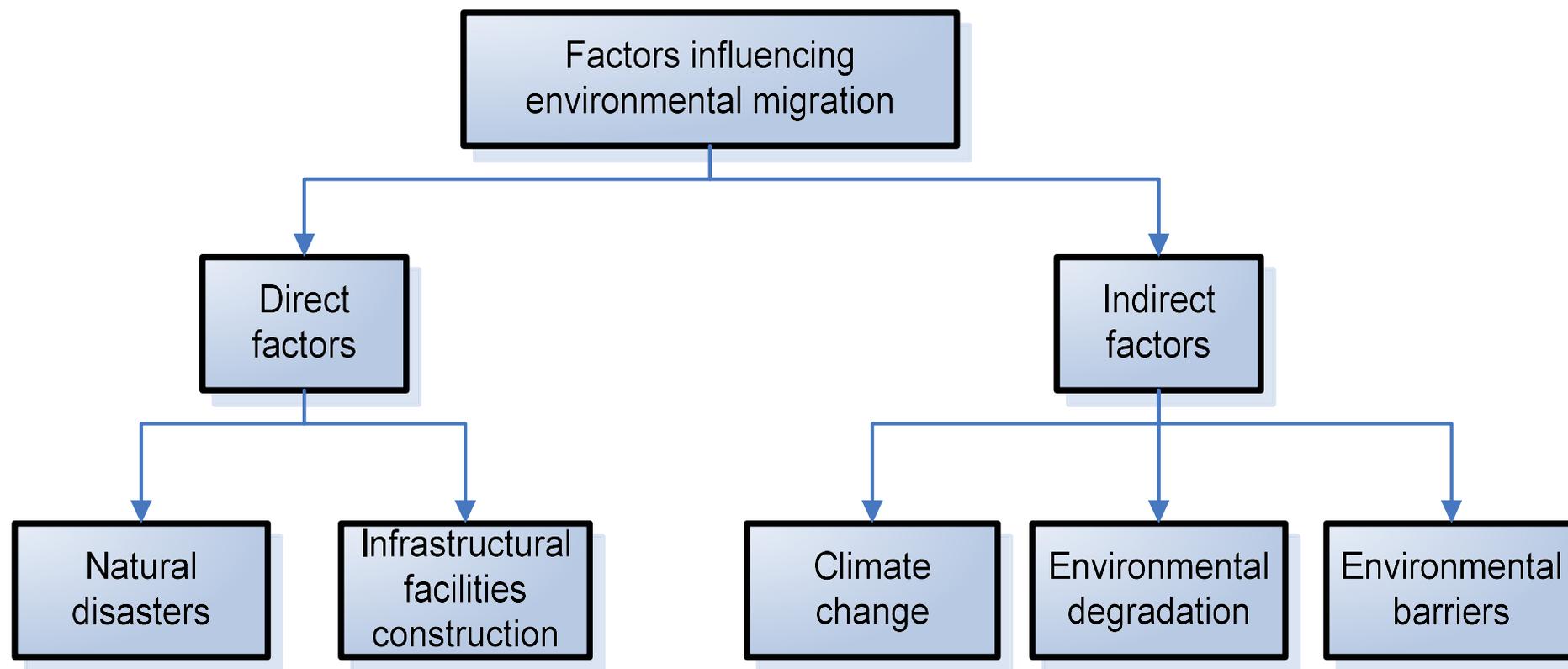


Źródło: Renaud et al. 2011

Some of the typologies of migration caused by the natural environment

El Hinnawi (1985)	Temporarily displaced people	Permanently displaces	Permanently migrating people
Castles (2002)	Development displaces	Environmental displaces	Disaster displaces
Shurke (1993)	Environmental refugee	Environmental migrants	-
Bates (2002)	Environmental refugees due to the disasters	Environmental refugees due to the expropriation of environment	Environmental refugees due to the deterioration of environment
Hunter (2007)	Migration as a response to natural hazards	Migration as a response to technological hazards	-
Stojanov et. al. (2014)	Environmental migrants	Environmental displaces Slow-onset Rapid onset	Development displaces

Factor influencing environmental migrations



(opracowanie własne na podstawie Lee 1966, Hugo 2008)



CAUSES OF ENVIRONMENTAL MIGRATIONS

CASE STUDIES



GETTING STARTED

Our introduction to climate change and migration

The relationship between climate change and migration is **complex**. Climate change impacts could force people to **move**, but also **trap** people in dangerous places. **Floods, droughts and rising seas** could force people flee across borders, but people are most likely to move within their own country when they can. Some people will have no choice about how or when they move. But when disasters unfold more slowly some people may decide to migrate and find alternative work. Some people may **decide** to move as a way of adapting to climate change impacts – with or without the help of their government.

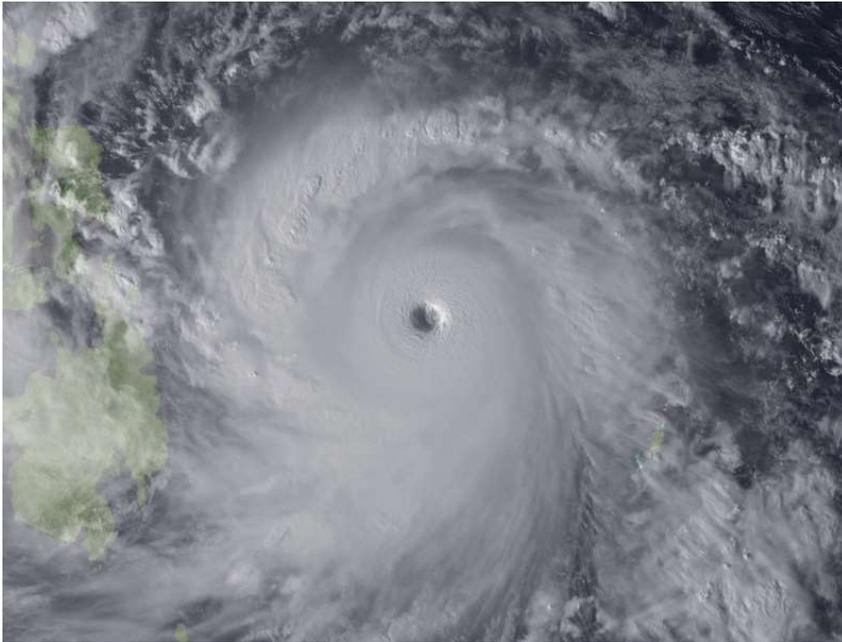
This fearless farmer in Philippines is defying the erupting Mayon volcano to support his family.

<https://www.facebook.com/aljazeera/videos/10156440077013690/>

Extreme disasters

Tayfun Haiyan in Filipines

- November 2013 r.
- Western part of Pacific Ocean
- Average wind speed - 312 km/h,



http://climatemigration.org.uk/getting-started-climate-migration/?utm_content=buffer3d856&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer 3.36



CENTRE OF
MIGRATION
RESEARCH

Floods in Asia

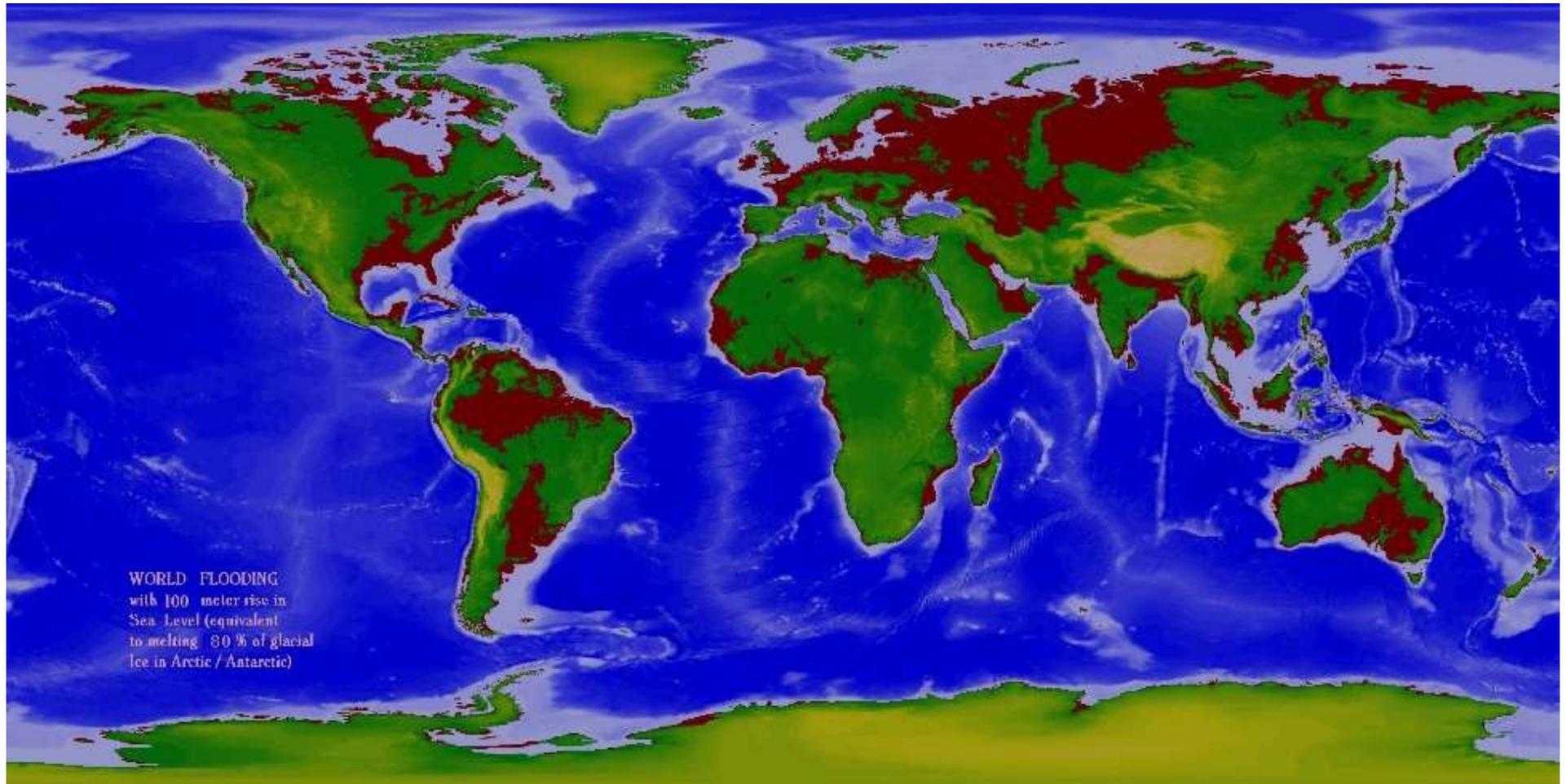
<https://www.facebook.com/attn/videos/1487993637902757/>



CENTRE OF
MIGRATION
RESEARCH

6.00 – powódź w Pakistanie

Introduction to climate change and migration

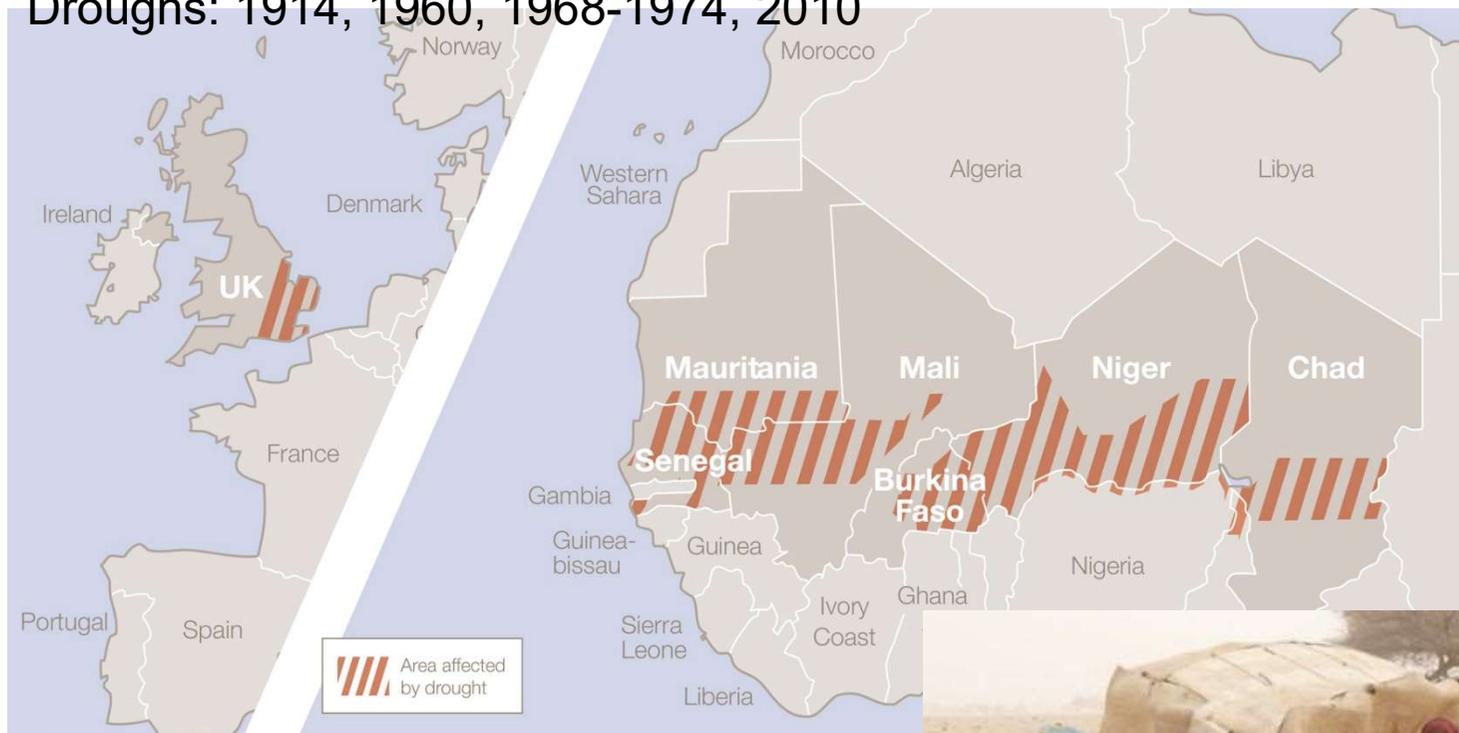


CENTRE OF
MIGRATION
RESEARCH

14' – sea level rise

Slow onset disasters – Horn of Africa

Droughts: 1914, 1960, 1968-1974, 2010

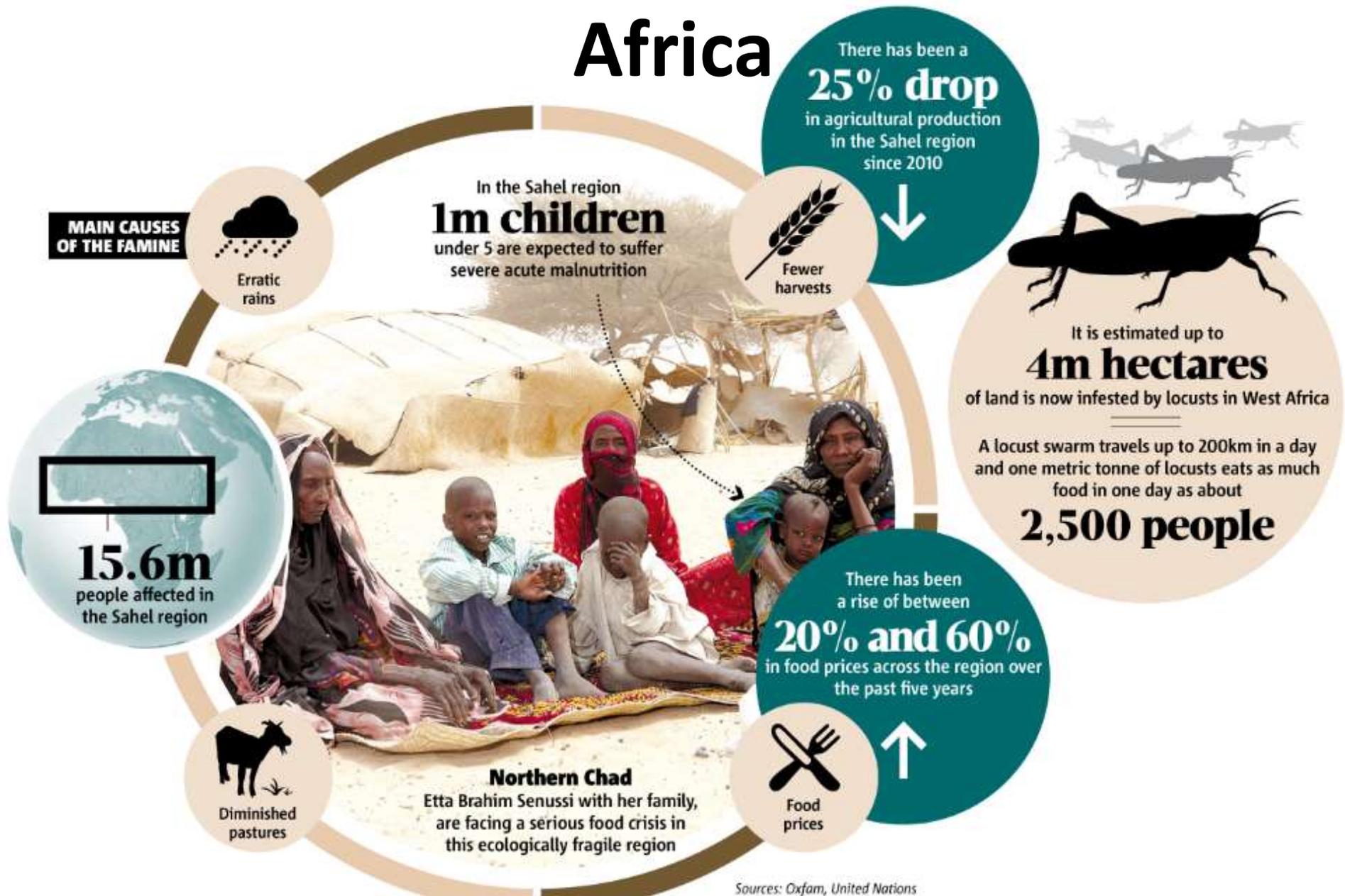


Source: UK Environment Agency/OCHA



CENTRE OF
MIGRATION
RESEARCH

Slow onset disasters – Horn of Africa





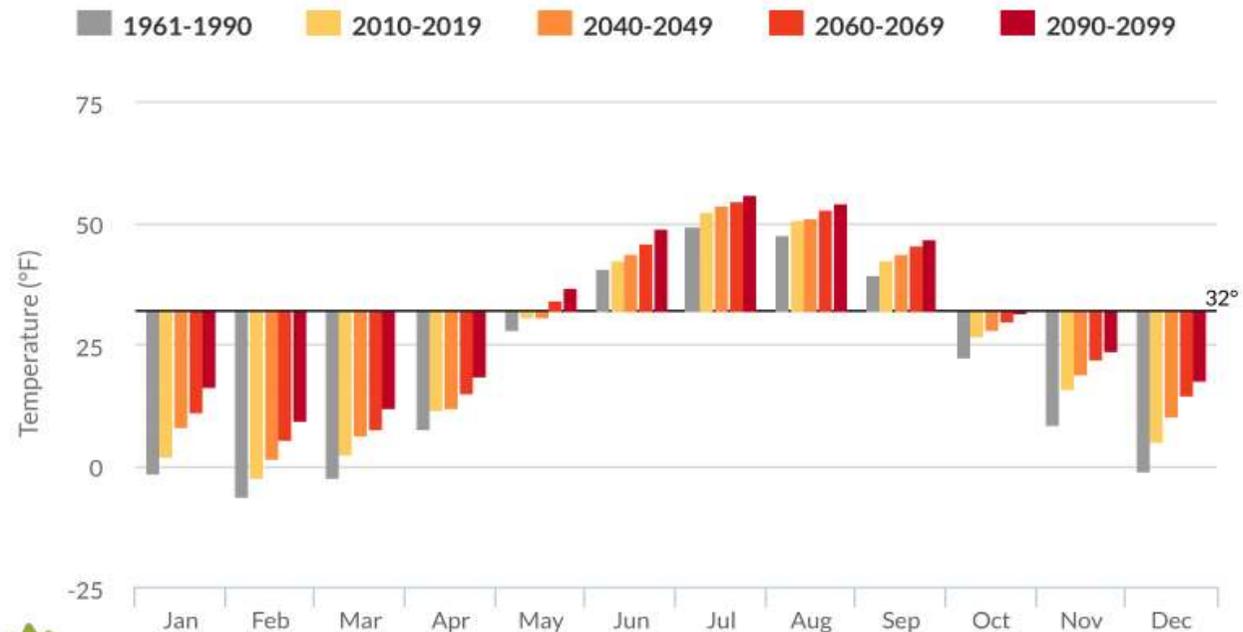
Kivalina, Alaska

„You can't adapt, you just have to get out of the way.”

<https://www.facebook.com/ajplusenglish/videos/861697160638459/>
 (podcast 2,16 min)

Average Monthly Temperature for Kivalina, Alaska

Historical CRU 3.2 and 5-Model Projected Average at 10min resolution, Mid-Range Emissions (RCP 6.0)



Due to variability among climate models and among years in a natural climate system, these graphs are useful for examining trends over time, rather than for precisely predicting monthly or yearly values.

Kivalina Alaska



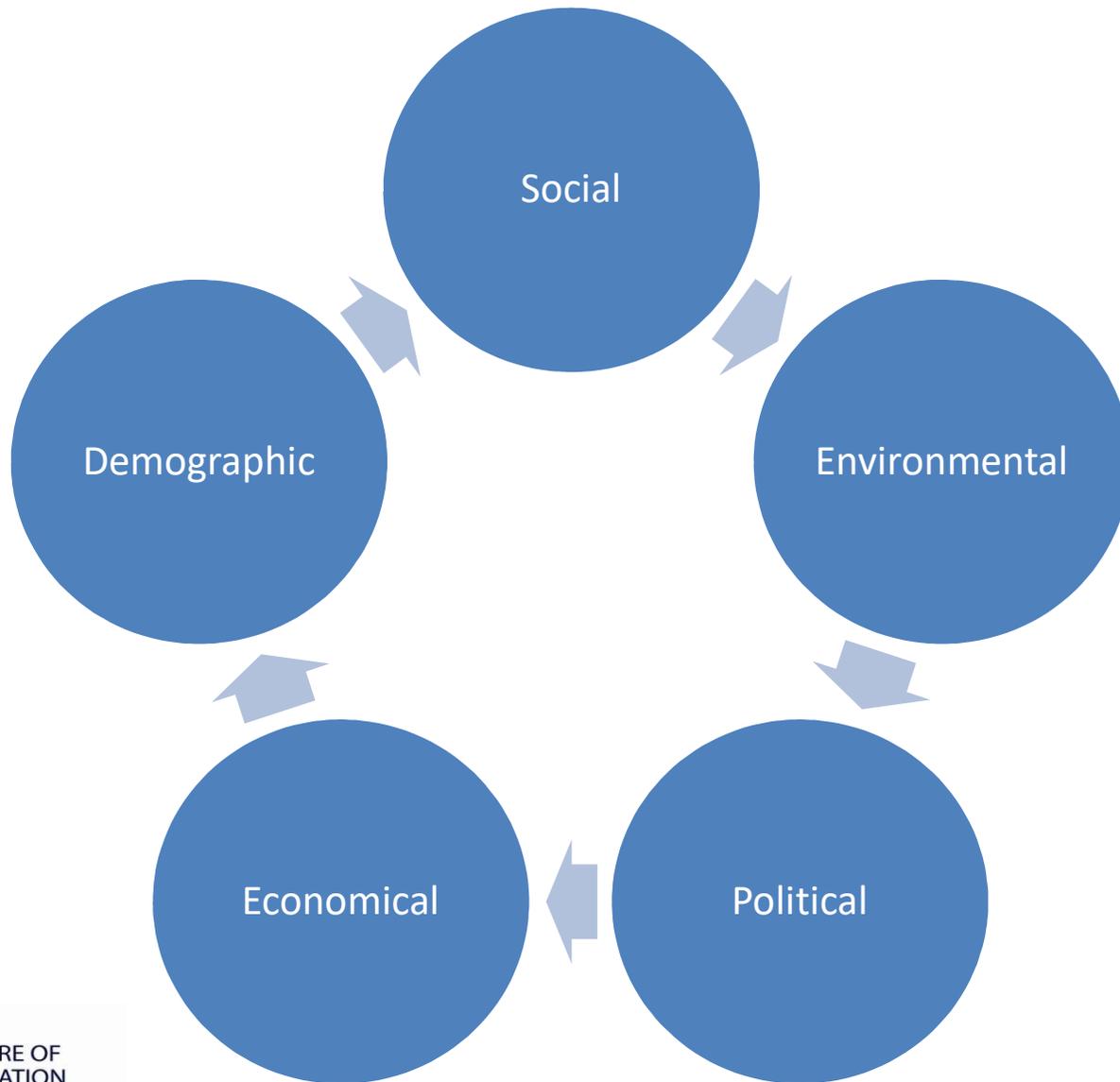
More information:

<https://toolkit.climate.gov/case-studies/relocating-kivalina>



CENTRE OF
MIGRATION
RESEARCH

Czynniki kształtujące migracje

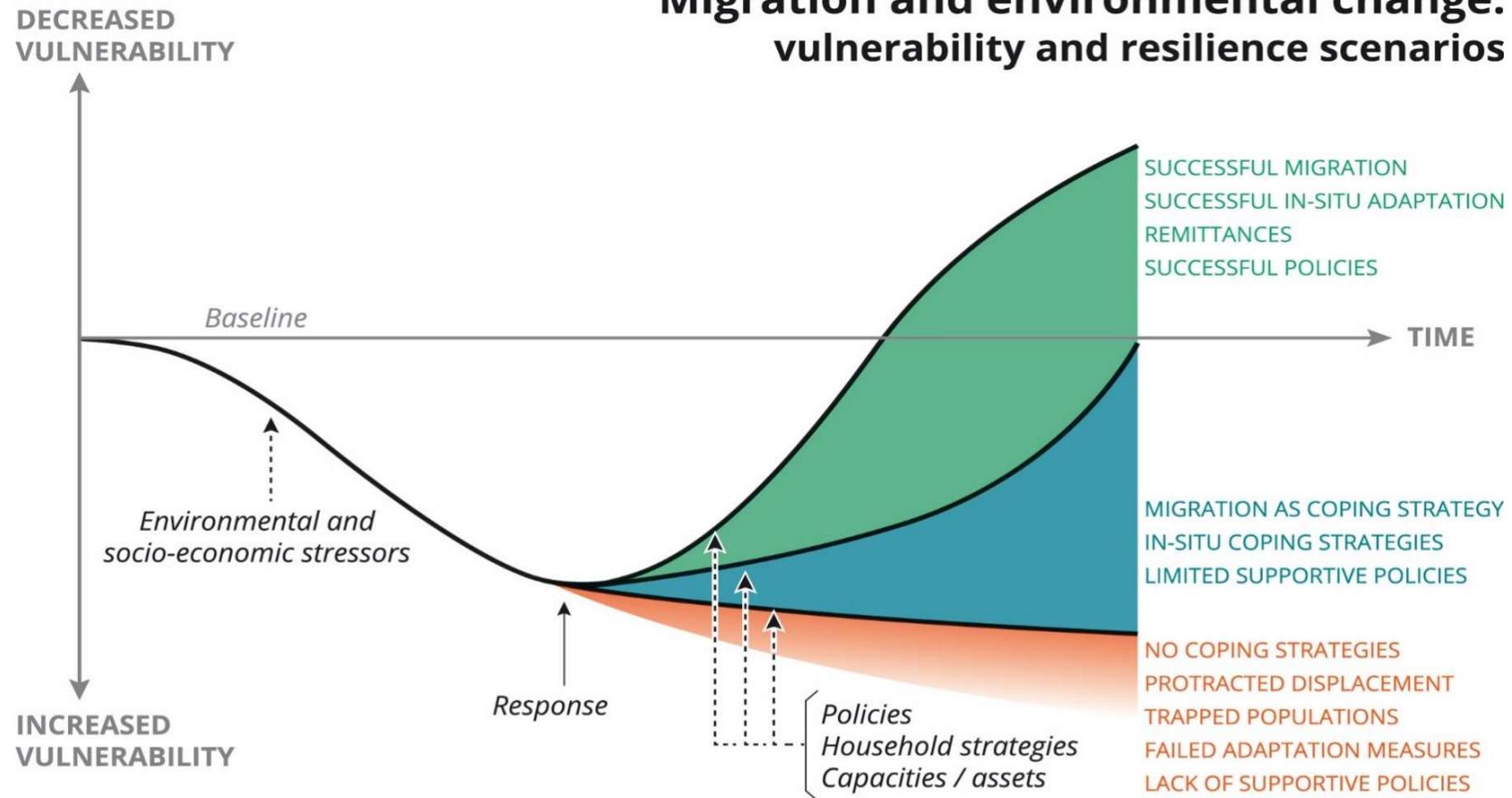


MIGRATION AS ADAPTATION TO ENVIRONMENTAL LIMITATIONS



CENTRE OF
MIGRATION
RESEARCH

Migration and environmental change: vulnerability and resilience scenarios



SUCCESSFUL ADAPTATION

Adjusting and improving skills and resources **proactively** to moderate harm or build on opportunities arising from climate change in the **long term**.

RESILIENCE

Ability to anticipate, absorb, accommodate, or recover from the effects of a hazardous event

COPING

Using **existing** resources to ensure basic functioning of society in the **short to medium term**.

VULNERABILITY

Propensity or predisposition to be adversely affected.

SURVIVAL

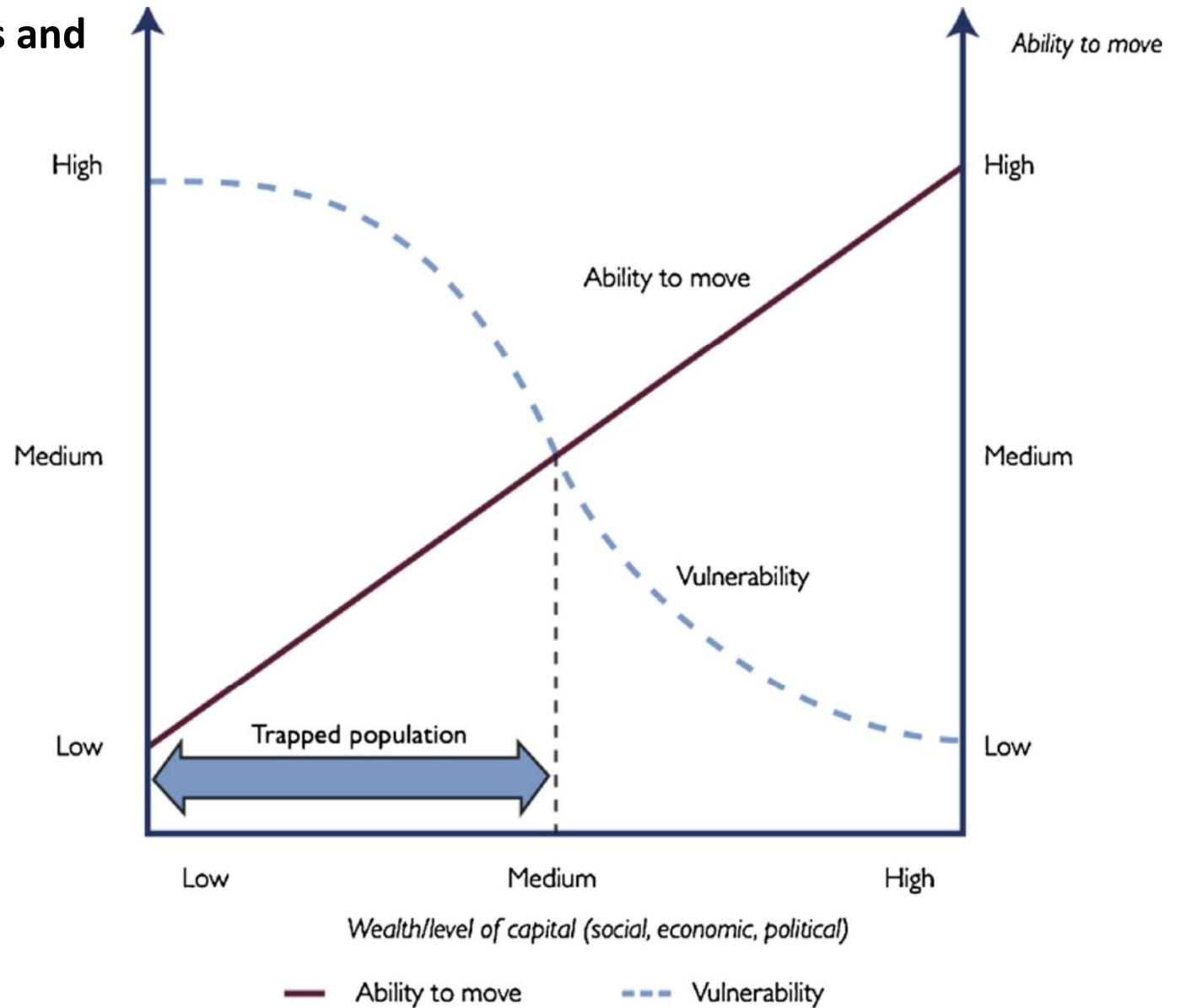
Staying alive in natural and man-made disasters i.e. flood, volcanic eruption but also slow-onset events.

Definitions taken from MECLEP Glossary, adapted from IPCC Reports 2012 and 2014. Graphic produced by Zoë Environment Network, © IOM 2015.



This infographic has been produced with the assistance of the European Union. The contents of this infographic are the sole responsibility of IOM and can in no way be taken to reflect the views of the European Union or of IOM.

Vulnerability to extreme environmental events and ability to move.



Source: Foresight (2011)

ENVIRONMENTAL MIGRATION AND CONFLICTS IN MODERN WORLD



CENTRE OF
MIGRATION
RESEARCH

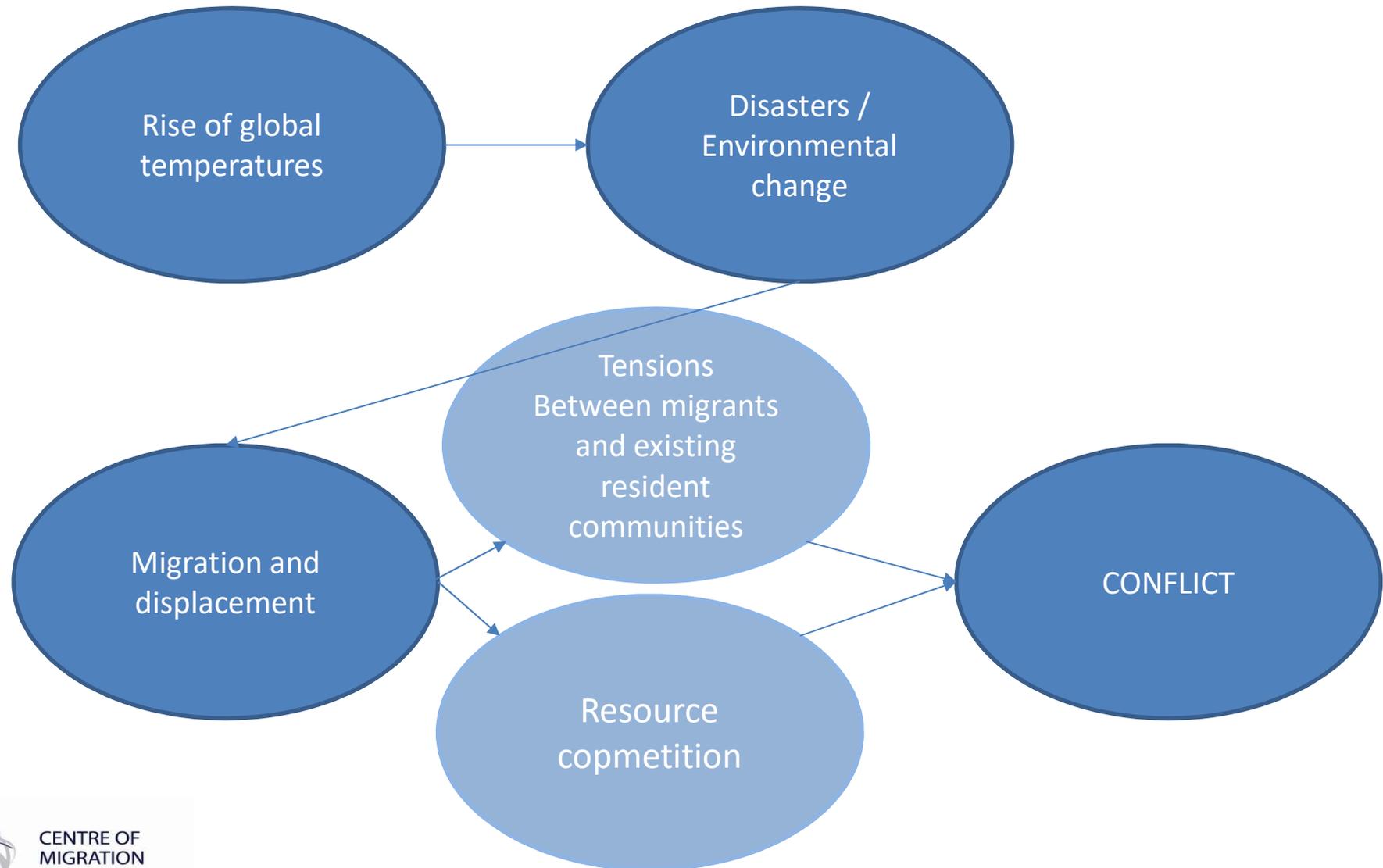
Environmental migrations and conflicts in the modern world - is there a connection?



CENTRE OF
MIGRATION
RESEARCH

<http://climatemigration.org.uk/video-climate-change-and-armed-conflict-how-are-they-linked/>

Environmental migrations and conflicts in the modern world



The crisis in Syria and role of climate change

Between 2006 and 2009

- ok 1.3 mil Syrian citizens lost crops
- Circa 800 000 lost source of income and source of food (Solh 2010).
- Crops of wheat and rye decreased respectively by 47% i 67%,
- The number of animals has decreased (ACSAD 2011).

2011

- 1,5 million of people— mostly agriculture and their families moved from rural areas to cities and camps in the suburbs of large Syrian cities (Aleppo, Damascus, Dara'a, Deir ez Zour, Hama, Homs)



The crisis in Syria and role of climate change

„Remedies“

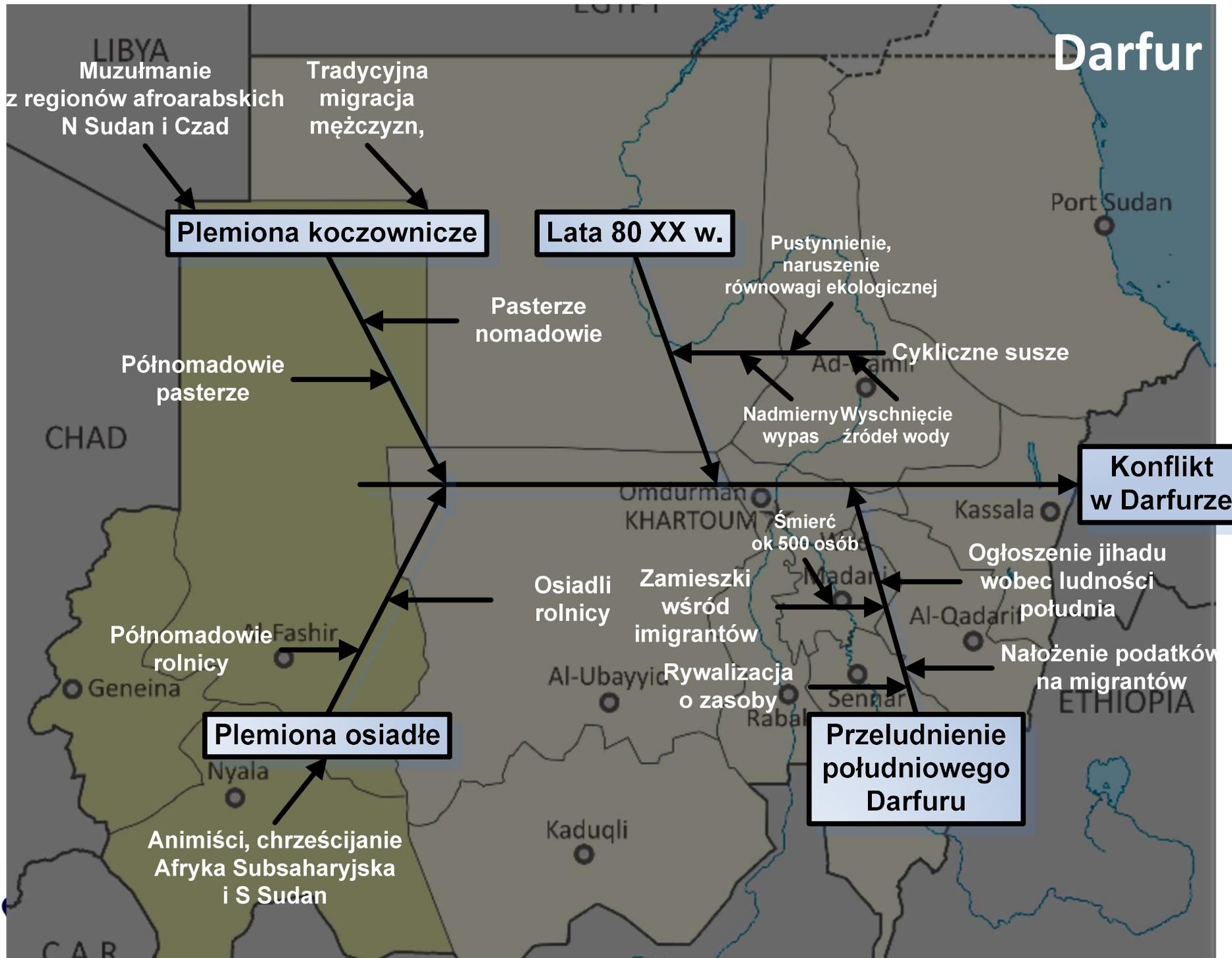
- Large subsidizing of crops that require large amounts of water (wheat, cotton)
 - No modernization of irrigation systems
 - Less than 1/5 uses gut a gut or sprinkling irrigation system
 - Half of the water resources are groundwater, which is increasingly depleted
 - Errors in hydrological investments caused a reduction in the level of groundwater and the salinity of agricultural areas.
- The first riots in the city of Dara - a particularly high number of young, unemployed men displaced due to crop failures



Video lecture: the crisis in Syria and role of climate change

- <http://climatemigration.org.uk/project/2883-2/>
- <http://climatemigration.org.uk/project/video-presentation-climate-change-and-the-refugee-crisis/>





POLICY

ENVIRONMENTAL MIGRATION POLICY



CENTRE OF
MIGRATION
RESEARCH

Effects of lack of legal regulations

- The rights of people who are forced to leave their place of residence as a result of changes / limitations of the natural environment and natural disasters are not regulated,
- Many of them should be protected by existing law regarding the basic rights of "human rights".
- Most of these people are not legally protected and fall into legal uncertainty.



Video: What the Paris agreement means for migration linked to climate change

Yet climate change does not make one a refugee, a designation for people forced to leave their home countries because of war, persecution or other violence. Someone seeking refuge from environmental disaster cannot apply for refugee status, lacks protection under the U.N. High Convention for Refugees and can be sent back to their countries of origin without question at any time.

- <http://climatemigration.org.uk/project/video-what-the-paris-agreement-means-for-migration-linked-to-climate-change/>



Global Compact for Migration: Thematic Session on Addressing Drivers of Migration

The Second Informal Thematic Session of the intergovernmental consultations and negotiations on issues related to the [Global Compact for Migration](#), dedicated to [“Addressing drivers of migration, including adverse effects of climate change, natural disasters”](#) took place on 22 and 23 May 2017 in New York.

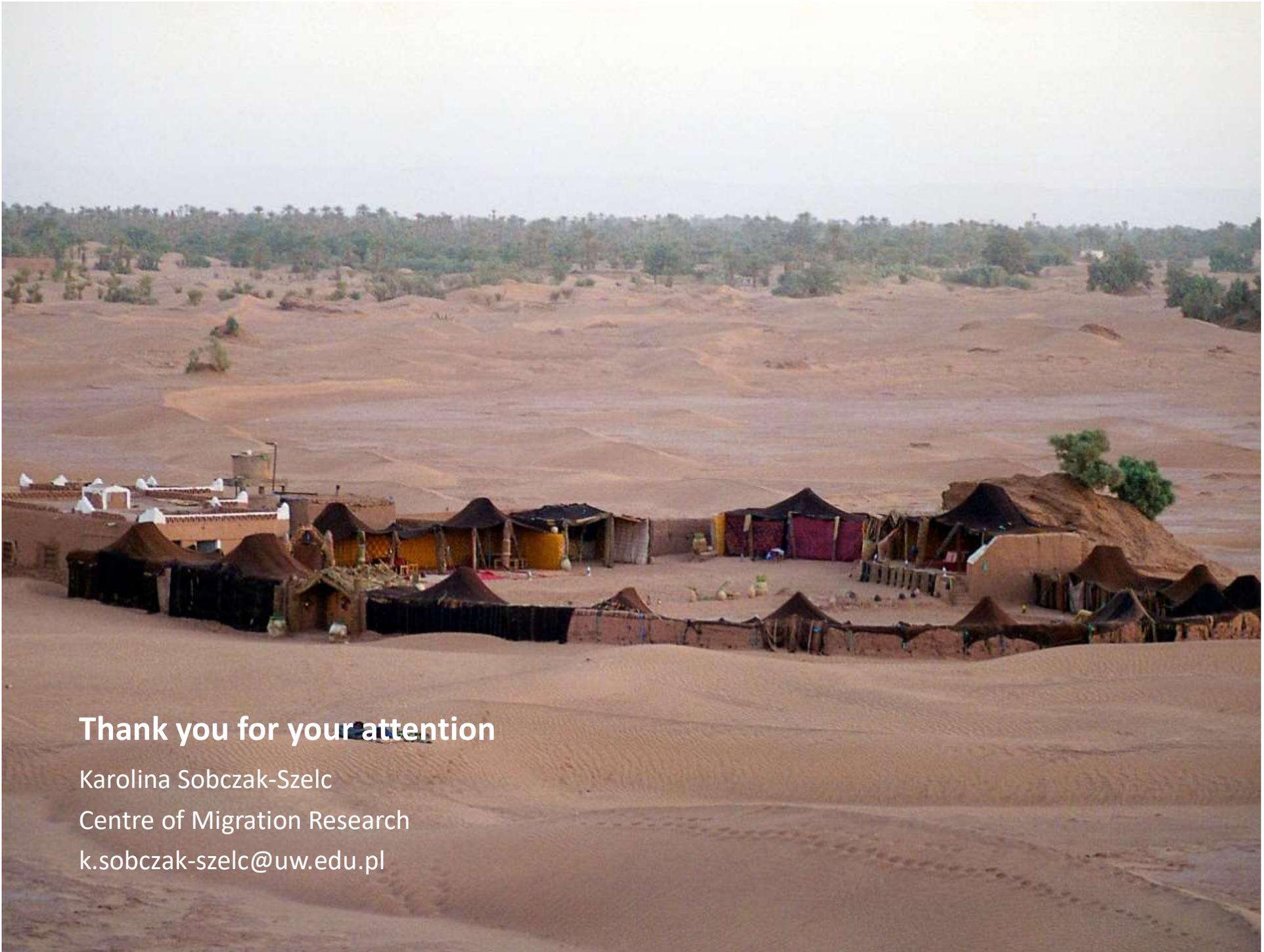
The Global Compact for Migration (GCM) will be the first intergovernmental negotiated agreement on international migration, and the decision by United Nations Member States to dedicate a space to issues of climate and environmental migration, is a politically significant signal.

Global Compact for Migration: Thematic Session on Addressing Drivers of Migration

Several concrete recommendations were put forward:

- supporting people to adapt to climate impacts through well managed migration and planned relocation,
- establishing labor schemes to support those migrating due to adverse impacts of climate change,
- providing temporary work visas and reinforcing temporary protection measures for victims of natural disasters.





Thank you for your attention

Karolina Sobczak-Szelc

Centre of Migration Research

k.sobczak-szelc@uw.edu.pl