## Linkages among Climate Change, Disasters, Conflicts and Population Displacement

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**Princeton University** 

Expert Group Meeting on the sustainable development impacts of conflicts, climate change, disasters, and population displacement

**UN Headquarters** 

20 February 2019

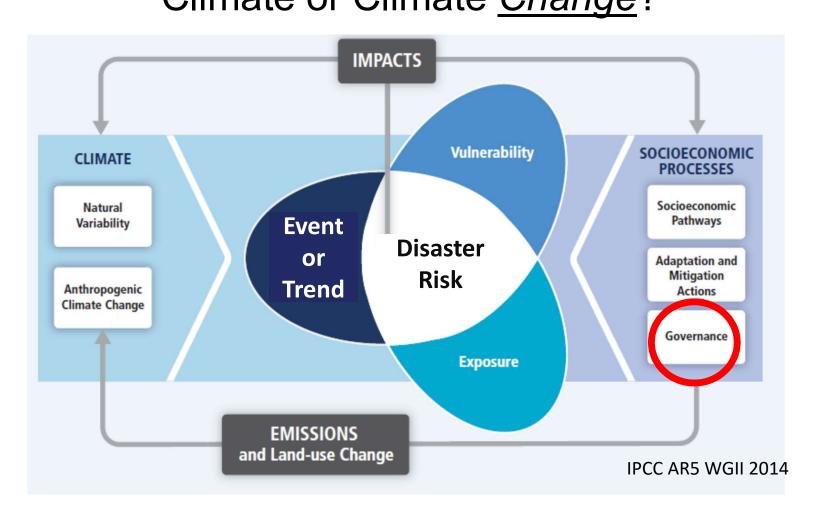
## **Objectives of Policy (ideally)**

- Reduce displacement and violent conflict
- Facilitate migration where overall benefits could accrue to migrants, to source regions, to receiving regions
- Improve conditions for receiving regions, sources regions, those stranded
- Otherwise, make it easier to stay in place

## **Larger Objectives for Experts**

- Ability to predict the where and when of climate-related migration and conflict
- Make useful contributions to policies toward
  - >>>migrants/displaced persons
  - >>>conflict minimization
  - >>>sustainable development, SGD attainment

# **Components of Climate-related Disaster**Climate or Climate *Change*?



# Sea Level Rise Exposure Model – direct and indirect

(LECZ=10m elevation, low and high population growth)

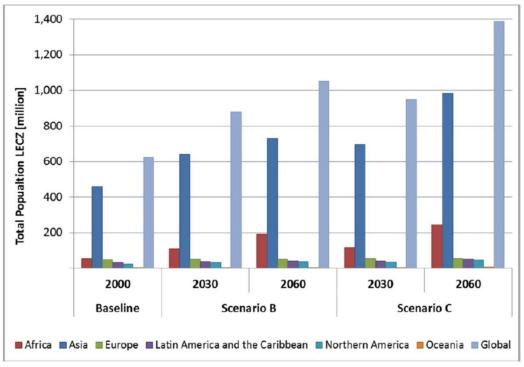


Fig 2. LECZ population in the year 2000 and projections for 2030/2060 per continent, scenarios A-D.

Neumann et al PlosOne2015

## How many times per century the current "100-year flood" will occur in 2050, 2100 ("AF")

	2050			2100			2150		
	1.5°C	AF 2.0°C A	F 2.5°C A	F 1.5°C Al	2.0°C AF	2.5°C AF	1.5°C AF	2.0°C AF	2.5°C
NYC	2.6	2.8	3.1	138.1	245.3	254.9	975.7	2462.9	1579.0
Charleston, OR	20.9	27.1	33.4	721.4	935.4	1392.4	3393.5	5374.5	4857.0
Christmas Isl.	924.8	1618.7	1555.5	12459.3	13772.5	14252.7	14788.1	15910.8	16184.2
Majuro, Marshal Isl.	846.8	1094.9	1040.5	9454.3	11645.9	12657.3	13756.1	15316.8	15610.8

Rasmussen et al 2018

## **Conflict and Climate**

Interpersonal Intergroup Group/state International

Direct Motivations:

- Economic necessity, greed
- Political
- Non-Rationale rage, hate
- "Too hot, Too dry"

Climate as direct and indirect driver, channels unclear

## Population Displacement, Migration and Climate

Refugees Migrants

Imminent danger Planned

### **Explicit Motivations:**

- Safety/Conflict
- Economic
- Political
- Cultural
- Climate Event or Trend?

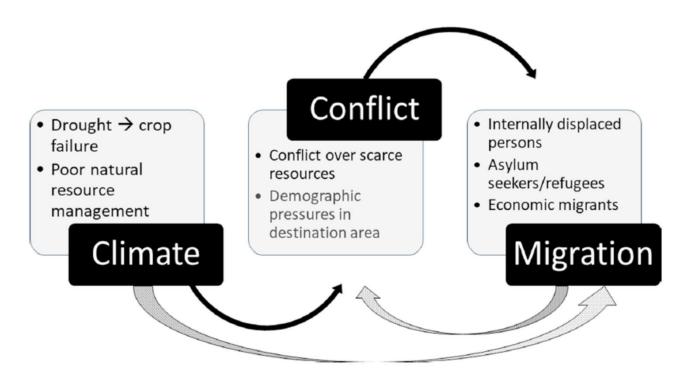
#### **Characteristics:**

- Household vs individual
- Economic remittances?
- Temporary vs permanent
- Short vs long distance
- Internal vs international

Climate as direct and indirect driver, some channels clear

## A Schematic Diagram of Relationships

Direction of causation?



Abel et al, GEC, 2019

## **Larger Context**

- Development and Urbanization
- Moving from exposure to one climate danger to another
- Role of existing networks

## **Specific Objectives for Experts**

 Focus on causes, channels, drivers but also *Outcomes* for >>>migrants/displaced persons

>>>source regions

>>>receiving regions

**Outcomes not much studied in the climate context** 

# Are climate-related disasters, migration, conflict unique?