

# Preparing for Uncertain Migration Futures

Mathias Czaika, Danube University Krems



The project *QuantMig: Quantifying Migration Scenarios for Better Policy* has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 870299  
[www.quantmig.eu](http://www.quantmig.eu)

## The issue

- The propensity to make predictions – and to act on the basis of predictions – is inherently human
- The **acceleration, proliferation and diversification** of social, economic, technological and political **transformations** and **shocks** make migration-related **risks and uncertainties increasingly unpredictable**.
- **Requirements for prediction** consistently **exceed the ability** to predict/forecast.
- **Planning** across a range of scenarios is **good practice** but does **not prevent predictive failure**.

**Predictive failure** ↔ **Governance failure**

- While some efforts to forecast the future of migration are necessary and predictive methods and techniques can be improved, the design of migration policy and governance should reflect the **likelihood of predictive failure**.
- Stakeholders need to **prepare for both: (likely and unlikely) trends and shocks**
- And: Prepare to be unprepared!

# Predictive failure – Governance failure

Example: COVID-19

Global Health Security Index  
October 2019

Country	Score
United States	83.5
United Kingdom	77.9
Netherlands	75.6
Australia	75.5
Canada	75.3

Source:  
Center for Health Security,  
John Hopkins University

COVID-19 deaths  
(as of 26 September 2020)

Country	Deaths
United States	204.112
Brazil	140.537
India	93.379
Mexico	75.844
United Kingdom	42.060

Source:  
Center for Systems Science and Engineering (CSSE),  
John Hopkins University

Illusion of preparedness:  
“What if?” has become “Now what?”



## „Constant crisis mode“

➤ **Crisis is a situation of a complex system**, in particular when the system is (temporarily) dysfunctional



- **Perception that migration policy and governance do not address and cope with the full ,complexity of migration‘**
  - **„Superdiversity‘**
    - Not only more migrants, but **more diverse** migrant populations
    - **Boundaries** between diverse migrant groups **get blurred**;
  - Distinct groups are **hard to target adequately by specific policies**
  - **Multiple actors** and stakeholders with **competing ideas and interests**
  - **Scientifically underinformed / biased discourses**
  
- What is an „adequate response“ to **growing complexity of migration** and the (perceived) **governance crisis**?

Understanding migration complexity  
means  
understanding the functioning of adaptive migration systems

We need to consider

*„migration no longer as a linear, uni-directional, push-and-pull, cause-effect movement but as a circular, interdependent, progressively complex, and self-modifying system in which the effect of changes in one part can be traced through the whole of the system.“*

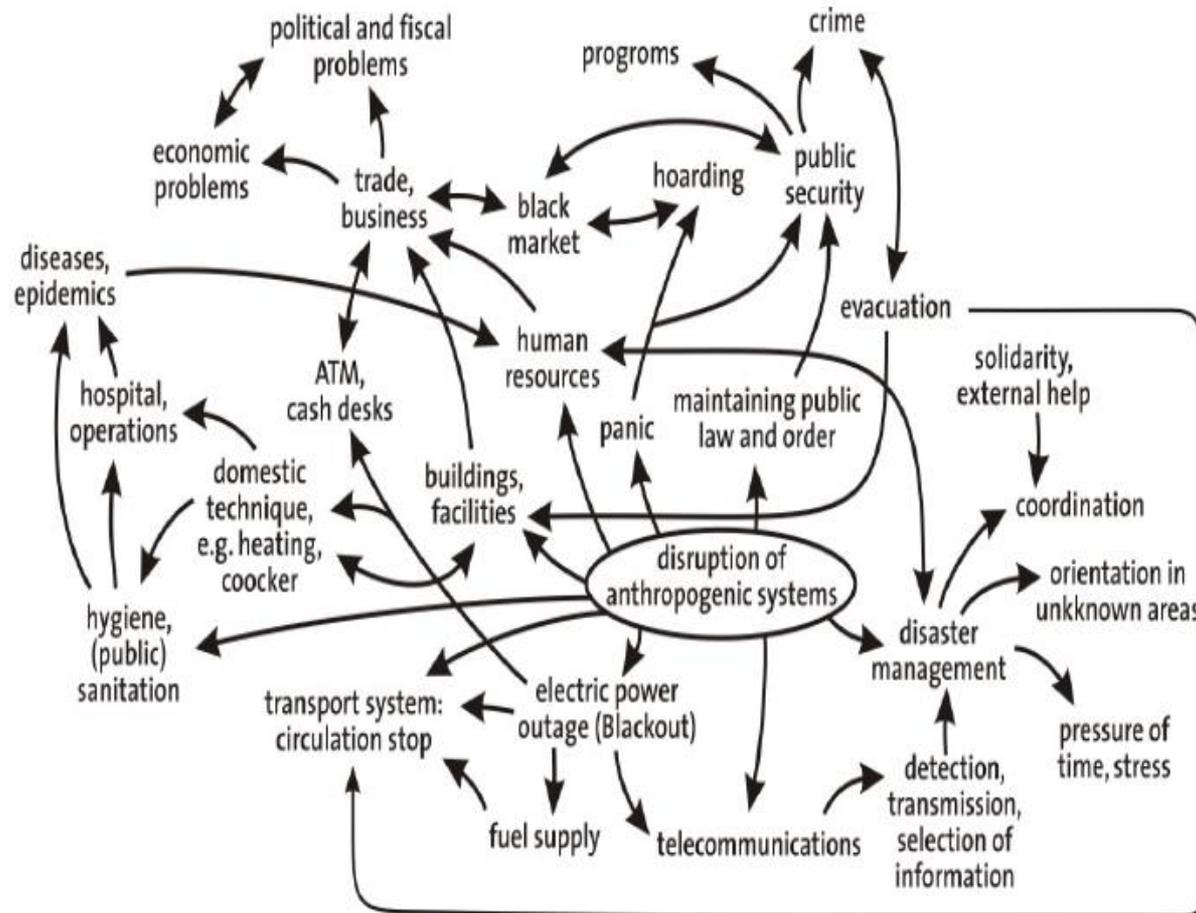
*Akin Mabogunje, geographer, 1970*

# Characteristics of complex migration systems

(adapted from Willekens 2012)

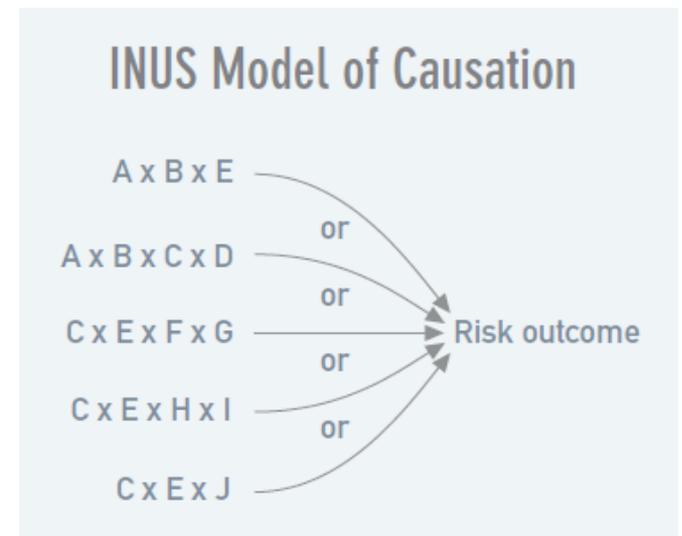
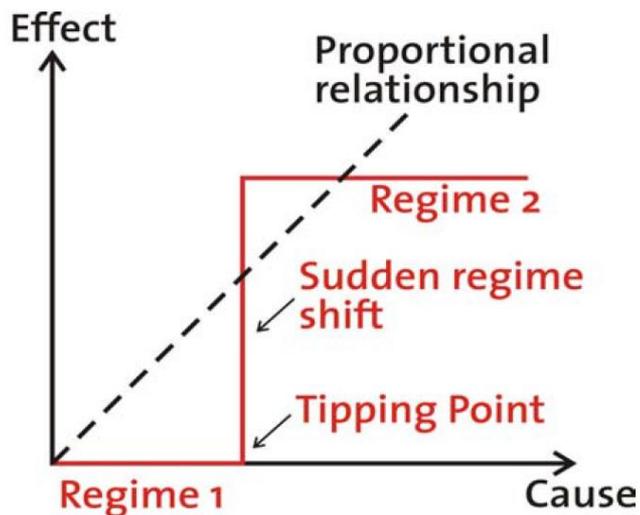
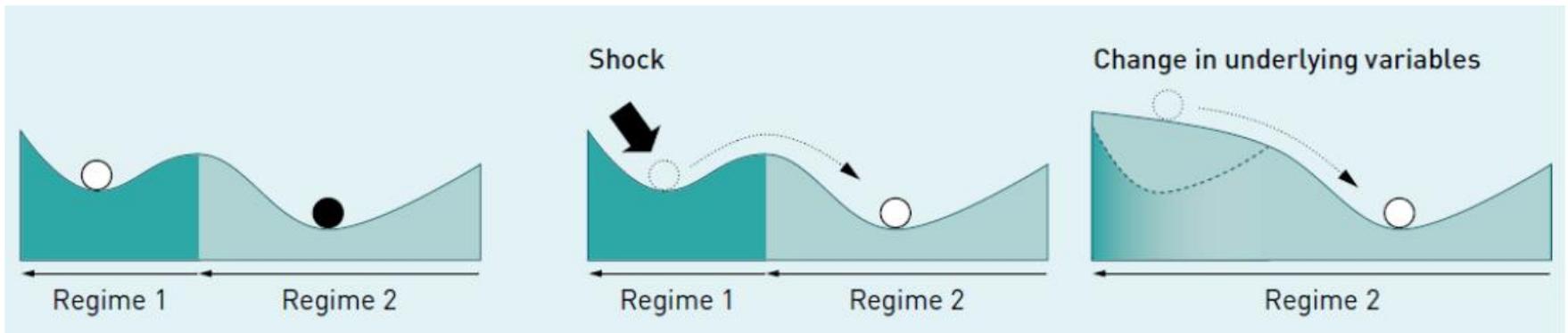
- Multiple actors drive a fluid and hierarchical migration system.
- Migration is a process and constantly influenced by **internal and external forces**.
- Agents interact and, as part of the **interaction**, exchange information and resources.
- Migration operates through **networks**.
- Continuous **adaptation** of migrant behavior and institutional policies.
- **Emergence** of migration patterns.
- A complex migration system is largely **self-organizing**.
- Complex migration systems respond to **disequilibria**.
- Migration is affected by epistemic (knowable) and aleatory (unknowable) **uncertainty**.
- Migration has only **limited predictability**.

# Understanding of migration 'driver complexes' rather than searching for 'root causes'



# Migration regime changes: non-linear and equifinal causation

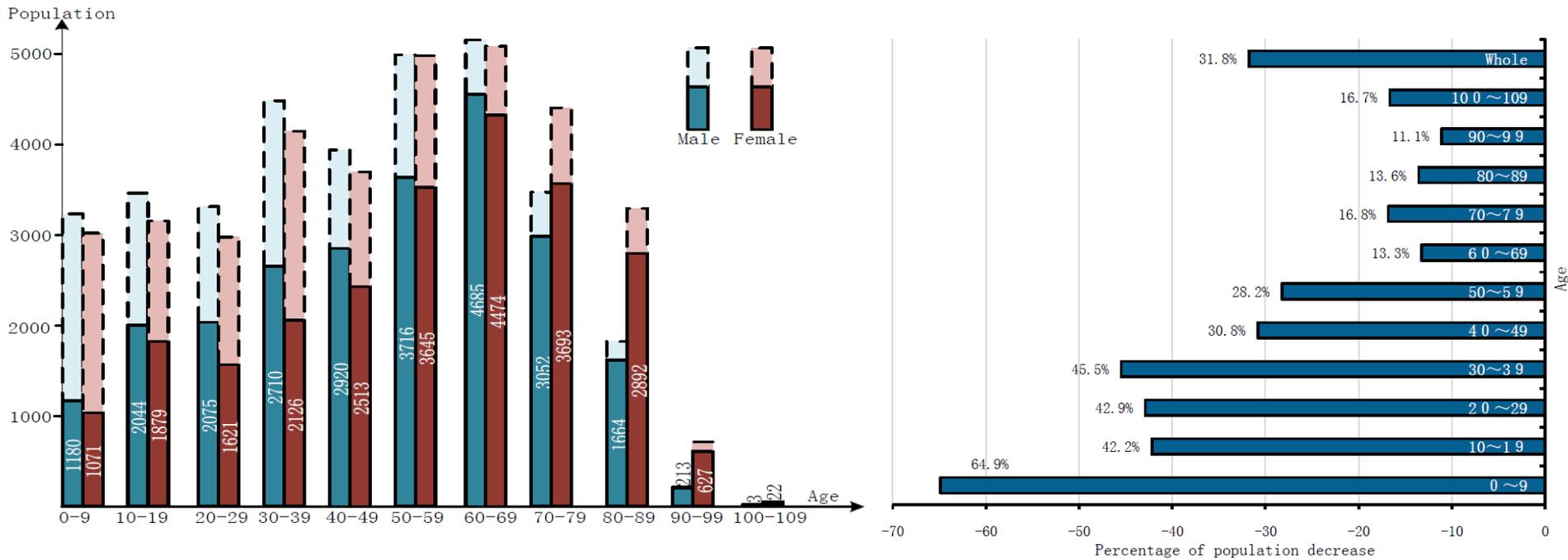
- **Sudden and gradual shocks** to systems may cause **uncontrolled feedback, cascading effects, extreme events, and unwanted side effects** regarding **migration outcomes**.
- **Systemic risks** evolve because of the inherently dynamic nature of **complex adaptive systems**, in particular, due to **nonlinear interactions** among system components.



# Example

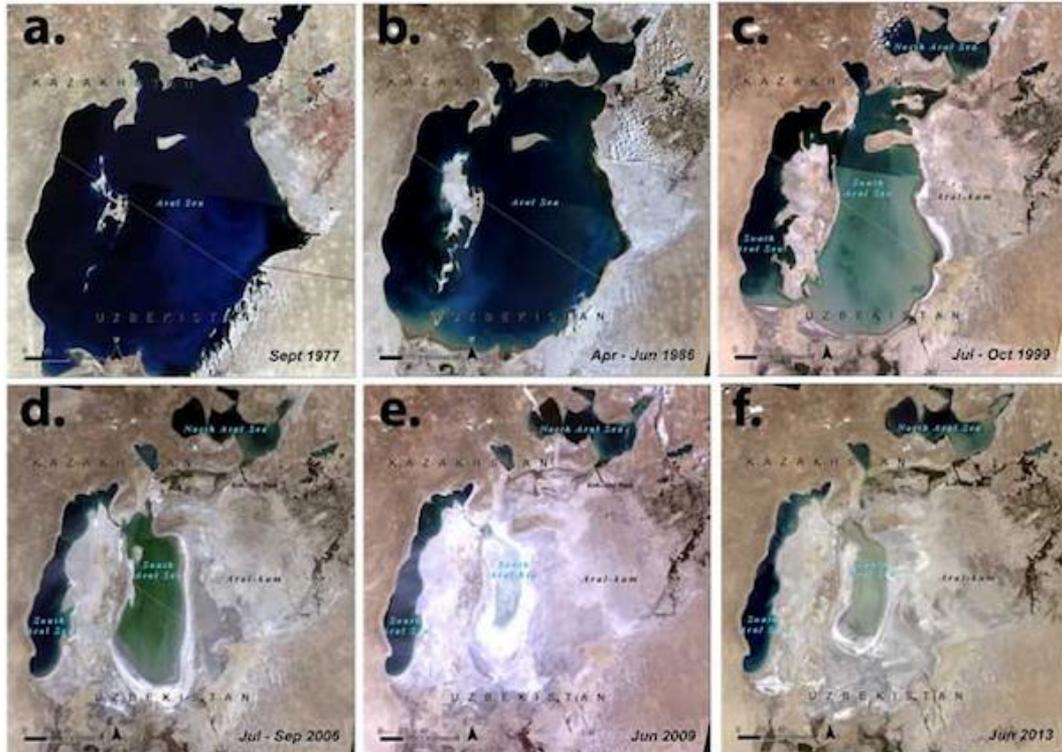
## Minamisoma City (Fukushima)

Earthquake, subsequent tsunami, power cut, nuclear accident, evacuation in March 2011  
 ...and partial return



Source: Zhang et al (2014)

# Example Aral Sea region: Depletion and emigration



Sep 1977 – June 2013

August, 2018

- **„Migration control crisis‘ is system-immanent**
  - Adaptation and systemic change (=migration crisis) is an intrinsic part of interconnected systems
- Adaptation and limited control capacity are key features of **complex migration governance**
  
- Policymakers (and other stakeholders) need to think about how to **avoid, mitigate or prevent the manifestation of systemic risks**, which may affect a migration system’s functioning.
- Actors must either **adapt** or **transform the governance of a migration regime** to cope with systemic risks, that come with **transitions**.

# How to prepare for uncertain migration futures (I)

## Know the factors causing systemic risk

- **Scientific unknowns** (i.e. lack of knowledge about how natural or human systems work)
- **Vicious cycles** (i.e. feedback effects and reinforcing negative loops)
- **Varying vulnerabilities** (e.g. group- and context-specific)
- **Conflicting interests and values.**
- **Social dynamics.**
- **Technological advances.**
- **Time-lags between shock and effect.**
- **Inadequate communication** (e.g. late, incomplete, misleading or absent)
- **Information asymmetries.**
- **Counterproductive incentives** (e.g. incentives triggering risk taking behavior)

# How to prepare for uncertain migration futures (II)

## Know the reasons causing policy failure

- Limited effectiveness of migration policy: discursive, implementation, and efficacy gaps
- Counterproductive / unintended policy effects
- Inadequate policy designs
  - Unidimensional (group specificities remain potentially unaddressed)
  - Targeting (area-, need-, group-specific)
  - Policy receptivity of diverse (and vulnerable) populations
  - Policy timing (addressing diverse migration trajectories, ‚sudden shocks‘)
  - ‚one size fits all‘ policies
- Limited policy coordination (actors, mechanisms, conflict identification & resolution, public/political support)
- Policy incoherences (migration policy measures in conflict with other public policies)
- Policy feedback loops (self-fulfilling prophecies, cf. Lucas critique)

- **Increase the capacity for accurate forecasting**
  - Enhancing the capabilities for surveillance, data collection, knowledge development, scenario planning and migration uncertainty analysis and diagnosis
  - Improve understanding of human behaviour and acknowledging that common sense and traditional rationality are not the sole basis for human decision-making
  - Improve understanding of systemic interconnections
  
- **Enhance smart governance and migration ‘mainstreaming’**
  - Accelerate decisions – and delay some decisions
  - Increase adaptability of migration and integration infrastructure
  - Prepare for the short term.
  - Regularly and systematically reviewing decision-making and communication processes;
  - Increase flexibility of migration governance through coordination, adaptation and innovation in response to changing situations and new indications of emerging risks;
  - **“Mainstreaming” migration**
    - Governance (coordination of multi-actor networks)
    - Policies (enhance policy coherence across multiple policy areas)
    - Discourses (nurture evidence-based discourse)



Thank you very much!

*[Mathias.Czaika@donau-uni.ac.at](mailto:Mathias.Czaika@donau-uni.ac.at)*