

*Proje Tanıtımı***PHOENIX¹ (Anka Kuşu)²: Sosyal Stres Çağında İnsan Hareketliliği,
Küresel Zorluklar ve Dayanıklılık Projesi****Susan Beth Rottmann³, N. Ela Gökalp-Aras⁴****Öz**

(PHOENIX), çevre ve iklim değişiklikleri, demografik değişiklikler, politik ve ekonomik gelişmeler, sosyo-kültürel hassasiyetler ve dönüşümler başta olmak üzere küresel değişikliklerin insan hareketliliğini nasıl etkilediğini inceleyen çok disiplinli bir araştırma projesidir. Proje, Coğrafi Bilgi Sistemi (CBS) tekniklerini kullanarak ve mevcut coğrafi, yer bilimi ve boylamsal veri kümelerini sentezleyerek söz konusu değişimlerin insan hareketliliği üzerindeki etkilerini veri modellemesi yoluyla analiz etmektedir. İklim değişikliği bilimi gibi doğa bilimlerini ve aynı zamanda siyaset bilimi, sosyoloji, psikoloji, ekonomi ve antropoloji gibi sosyal bilimleri bir araya getiren proje, küresel değişim ve insan hareketliliğinin yanı sıra “kırılganlık (vulnerability)” ve “dayanıklılık (resilience)” unsurlarının disiplinlerarası analizine odaklanmaktadır.

PHOENIX, karşılaştırmalı ve kapsamlı bir küresel bir analiz sunabilmek için Güney Amerika, Avrupa, Orta Doğu ve Afrika'dan 9 farklı ülkeden 11 üniversite, araştırma enstitüsü ve sivil toplum kuruluşunu bir araya getirmektedir. Bu 3 yıllık bu araştırma projesinin 1.174 milyon Avroluk bütçesi, Belmont Forum çatısı altında 6 farklı kurum tarafından finanse edilmektedir.

Anahtar Kelimeler: İklim kaynaklı nüfus hareketleri, sosyal dönüm noktaları, entegre yönetim, hayatta kalma stratejileri, kırılganlık, dayanıklılık, aidiyet, politika.

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² PHOENIX (Anka kuşu), döngüsel olarak yenilenen veya başka bir şekilde yeniden doğan ölümsüz bir kuştur. Yunan mitolojisinin bir parçası olmakla birlikte Mısır ve Pers gibi birçok kültürde de benzerleri bulunmaktadır. Mitolojide, Arap çölünde beş ya da altı yüzyıl boyunca yaşayan, bu süreden sonra sefaletin küllerinden yenilenmiş gençlikle yeniden doğup başka bir döngüyü yaşayan eşsiz bir kuş olarak yer alır (<https://www.britannica.com/topic/phoenix-mythological-bird>). Projede “Anka Kuşu” na dayanıklılık (resilience) vurgusuyla gönderme yapılmıştır.

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Project Presentation

PHOENIX: Human Mobility, Global Challenges and Resilience in an Age of Social Stress

Abstract

The Human Mobility, Global Challenges, and Resilience Project (PHOENIX) in the Age of Social Stress is a multidisciplinary research project that examines how global changes -including environmental and climate change, demographic transformations, political and economic developments, and socio-cultural vulnerabilities- impact human mobility. The project analyses the impacts of these changes on human mobility through data modelling of social tipping by utilising Geographic Information System (GIS) techniques and synthesising existing geographical, geoscientific/ earth science, and longitudinal datasets. PHOENIX brings together natural sciences such as climate change science and social sciences, including political science, sociology, psychology, economics, and anthropology, focusing on the interdisciplinary analysis of global change and human mobility and the elements of “vulnerability” and “resilience”.

PHOENIX brings together 11 universities, research institutes, and non-governmental organisations from 9 countries across South America, Europe, the Middle East, and Africa to provide a comparative and comprehensive global analysis. The budget of 1.174 million Euros for this 3-year research project is financed by 6 different institutions under the umbrella of the Belmont Forum.

Keywords: Climate mobilities, social tipping points, integrated governance, community survival, vulnerability, resilience, belonging, policy.

Introduction

phoenix

human mobility - global challenges - resilience

environmental and climate-related, demographic, political and economic developments, and socio-cultural vulnerabilities- impact mobility.

The Human Mobility, Global Challenges and Resilience in an Age of Social Stress (PHOENIX) Project is a study of how global changes affect people's ability and willingness for mobility. It examines how global changes- particularly

This 3-year research project aims to model social tipping points by utilising geographic information systems (GIS) techniques and synthesising existing geographical, earth science and longitudinal datasets. The project applies a governance of crisis approach to understand how diverse policy areas ranging from sustainable development and disaster risk reduction to health, food, and climate change might be bridged with larger policy frameworks to understand and predict mobility patterns. The project conducts two human-centric case studies of social tipping points: "food security and belonging" and "cultural survival and resilience". These case studies provide new ways of looking at how socio-cultural contexts and the psycho-social health of populations shape climate (im-)mobilities and their social tipping points. The project adds to the interdisciplinary diagnostic and prognostic toolbox of global change and mobility as well as vulnerability and resilience assessments drawing on natural and social sciences. This research project utilises a comprehensive evidence base - from Europe and the Middle East to Africa and South America - to ensure its findings' maximum comparative and global impact. This research project examines the societal and environmental aspects of global change and (im-)mobilities to help leaders and the most vulnerable members of societies understand, adapt, and thrive.

Background, Objectives, Research Questions, Clusters and Approach⁵

The coronavirus pandemic has illustrated how radically socio-ecological risks can transform the everyday lives of citizens. Just as countries appeared to get a handle on the pandemic in 2021, the conflict in Ukraine in 2022 sent more refugees into Europe than had arrived since the Second World War, followed by the humanitarian crisis in Gaza in 2023. On the other side of the Atlantic, political and social upheaval, climate, food, and health crises sent migrants from Cuba, Haiti, Venezuela and



⁵ This visual was designed by artificial intelligence (AI) using the keywords of the project.

other countries to North and South America. Along with highlighting the ongoing migration issue, the COVID-19 pandemic and conflicts in Ukraine have brought the complexity and sensitivity of global supply chains and food and energy security to the forefront of politics.

The nexus between climate change, food security, and migration represents one of the most pressing challenges of our time, especially in light of recent developments. As climate change intensifies, it brings about profound shifts in weather patterns, leading to more frequent and severe natural disasters, such as droughts, floods, and hurricanes. These extreme weather events have direct and devastating impacts on agricultural productivity and food security, jeopardising the livelihoods of millions, particularly in vulnerable communities. The scarcity of food and the loss of livelihoods, in turn, become powerful drivers of migration. People are forced to leave their homes in search of food, safety, and better living conditions, often leading to internal displacement or international migration. This movement of people not only poses significant social and economic challenges but also raises humanitarian concerns.

Understanding and addressing the interconnectedness of these issues is crucial for developing effective policies and strategies. Mitigating the impacts of climate change, ensuring sustainable food production, and managing migration flows are no longer isolated challenges; they must be tackled in a cohesive and coordinated manner. This approach requires a deep understanding of the complex interplay between environmental, economic, and social factors, highlighting the need for integrated solutions that are adaptive, resilient, and sensitive to the needs of the most affected populations.

These recent events show how global change's environmental and economic impacts, ineffective governance, and human mobilities are linked in complex ways. Understanding how individuals and communities emerge phoenix-like from challenges is more important than ever – from the literal flames of global heating and destroyed environments to the abstract flames of cultural, heritage and demographic loss. What strategies enhance resilience and enable societies to take flight again?

In order to tease the linkages between global change, mobility and resilience apart, PHOENIX draws heavily on the social and natural sciences and seeks to offer a rigorous evidence base for the assessment of how global change impacts mobility and its consequences at local, national and international levels. It aims to develop a database, tools, guidelines and platforms to aid practitioners in designing and implementing migration policy that is flexible and robust enough to respond to global change and to support societal resilience. It focuses on the global scale of climate mobilities and three unique regions (Europe, South America and the Middle East) to maximise comparative advantages regarding climate pressures, mobility experiences and policy frameworks.

Using the lens of climate mobilities to capture the range of (im)mobilities tangled up and related to changes in the climate, and the concept of “social tipping points” (STPs)⁶ and focuses on the governance of climate mobilities. It aims to develop integrated governance models in light of its interdisciplinary research and findings and consider important aspects such as migrants’ trajectories, belonging, and resilience. In particular, two case studies focus on “food security and belonging” and “community survival and resilience,” we will study how migrants perceive mobility, mobility policy and climate risks and when and how they exercise agency in governance contexts.

PHOENIX has three main objectives drawing on both quantitative and qualitative data:

1. Develop a model for understanding social tipping points
2. Develop rated governance models of climate mobilities
3. Use human-centric case studies to improve mobility and integration policy-making

PHOENIX asks 5 important research questions:

1. What are potential social tipping points (STPs) and their influencing factors?
2. How are governance frameworks in a range of policy silos responding to the intersection of STPs and climate (im)mobilities?
3. How do individuals perceive STPs, migration, health and food policies, and other policies that affect them, and to what extent do prospective migrants and vulnerable populations have agency within governance frameworks?
4. How do culturally diverse populations develop their own strategies to ensure survival, adaptation and coping within the (new) societies they inhabit, strengthen belonging, and mitigate cultural extinction risks?
5. How do vulnerable (im-)mobile people reflect upon Global Changes and corresponding threats to cultural survival via their food and (physical and mental) health practices?

To be able to respond to the selected questions in the framework of chosen objectives, PHOENIX has 5 clusters:

• **Cluster 1: Database and Analysis for Modelling of SPTs**

PHOENIX uses GIS techniques to build a comprehensive database on relevant aspects of migration and global changes, such as environmental, governance, and economic factors, creating a solid foundation for an integrated systems approach to objectively identify social tipping points.

⁶ See Milkoreit, M., Hodbod, J., Baggio, J., Benessaiah, K., Calderón-Contreras, R., Donges, J., Mathias, J., Carlos Rocha, J., Schoon, M. and Werners, S. (2018). “Defining tipping points for social-ecological systems scholarship—an interdisciplinary literature review.” *Environmental Research Letters*, 13(3), 033005. doi:10.1088/1748-9326/aaaa75.

• **Cluster 2: Governance of Climate Mobilities**

PHOENIX examines governance across policy silos, identifying points of entry in humanitarian, development, agriculture, food, health, environment and climate policy, and will theorise governance frameworks holistically and beyond the confines of migration policy to increase policy coherence and impact via integrated governance.

• **Cluster 3: Food Security and Belonging**

PHOENIX expands our understanding of vulnerability and resilience by focusing more closely on two case studies on mobility and global change: food, belonging, and survival in society.

• **Cluster 4: Existential crises and resilience**

PHOENIX expands our understanding of vulnerability and resilience by focusing on two case studies related to mobility and global change: food and belonging and community survival. The case studies enable us to add a human agency perspective to analyses of governance and analyses of the differential impacts of gender, race, class, migrant status, geography, and age on mobility and climate risk.

• **Cluster 5: Interdisciplinary Knowledge Synthesis**

PHOENIX draws on the project's natural science data modelling and social science research to identify potential hotspots of migration and suggest coordinated interventions that protect vulnerable populations, enhance community well-being, and build societal resilience to Global Changes.

PHOENIX adopts a transdisciplinary approach embracing natural and social sciences and humanities and benefits from mixed methods as follows

- Dataset, GIS technologies
- Interpretive policy analysis and interviews with stakeholders
- Ethnographic studies
- Quantitative and qualitative data gathering
- Synthesising interdisciplinary knowledge production

PHOENIX's transformation and impact are planned through academic seminars, expert panels, policy documents, digital art exhibitions and podcasts.

PHOENIX Project brings together 11 universities, research institutes and non-governmental organisations from 9 countries from South America, Europe, the Middle East and Africa in the natural and human sciences.



6 different institutions finance this 3-year research project's budget of 1.174 million Euros under the Belmont Forum⁷. The following table provides a glance at the consortium.

Organisation Name	Organisation Type	Disciplines and Area	Country	Funding Institution
Özyeğin University (OzU) (Coordinating Organisation)	Academic, Training and Research	Social Science/ Migration, mobilities, inequalities and gender& Governance, law and policy experts	Turkey (TUR)	TUBITAK ⁸
Uppsala University (UU)	Academic, Training and Research	Social Sciences/ Governance, law and policy experts& Migration, mobilities, inequalities and gender	Sweden (SWE)	FORMAS ⁹
University of Gothenburg (UGOT)	Academic, Training and Research	Natural Sciences/ Climate science and climate mobilities specialists	Sweden (SWE)	FORMAS
University of Campinas (UNICAMP)	Academic, Training and Research	Natural and Social Sciences/ Governance, law and policy experts	Brazil (BRA)	FAPESP ¹⁰

⁷ Further information is available at: <https://www.belmontforum.org/about> [Accessed 21 November 2023].

⁸ The Scientific and Technological Research Council of Turkey

⁹ The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning

¹⁰ The São Paulo Research Foundation

University of Continuing Education Krems (UWK)	Academic, Training and Research	Natural and Social Sciences/ Climate science and climate mobilities specialists & Governance, law and policy experts	Austria (AUT)	FWF ¹¹
International Institute for Applied Systems Analysis (IIASA)	International NGO	Natural Sciences/ Climate science and climate mobilities specialists	Austria (AUT)	FWF
University of the Republic (UDELAR)	Academic, Training and Research	Social Sciences/ Governance, law and policy experts	Uruguay (URY)	IAI ¹²
Global Gender, Economy, and Global Citizenship Institute (EQUIT)	National NGO	Social Sciences/ Migration, mobilities, inequalities and gender	Brazil (BRA)	IAI
Citizens' Association for Human Rights (ACDH)	National NGO	Natural and Social Sciences/ Climate science and climate mobilities specialists & Governance, law and policy experts	Argentina (ARG)	IAI
Body and Energy Foundation - Neoreichian Theories and Methods (FCE)	Foundation	Social Sciences/ Migration, mobilities, inequalities and gender	Chile (CHL)	IAI
Institute for Economic Research on Innovation, Tshwane University of Technology (IERI)	Academic, Training and Research	Natural and Social Sciences/ Climate science and climate mobilities specialists & Governance, law and policy experts	South Africa (ZAF)	NRF ¹³

PHOENIX is coordinated with two co-coordinators Dr. Susan Beth Rottmann (Özyeğin University) and Soner Barthoma (Uppsala University). The Turkey leg of the project has a wide research group from different disciplines.

¹¹ The Austrian Science Fund

¹² The Inter-American Institute for Global Change Research

¹³ The National Research Foundation

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The PHOENIX project started in July 2023 and will end in June 2026. For further information, outcomes and publications: www.phoenix-climatemobilities.com.

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<https://www.belmontforum.org/archives/projects/human-mobility-global-challenges-and-resilience-in-an-age-of-social-stress>

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<https://www.youtube.com/watch?v=5a0mF1Di-7E>

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