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# COMMUNICATION BRIEF

## BUILDING NEXUS RESILIENCE: ADDRESSING MIGRATION AND CONFLICTS IN WATER-ENERGY-FOOD (WEF) SYSTEMS

### WEBINAR 4 - SPECIAL SESSION DRESDEN NEXUS CONFERENCE 2025

APRIL 9, 2025

# BUILDING NEXUS RESILIENCE: ADDRESSING MIGRATION AND CONFLICTS IN WATER-ENERGY-FOOD SYSTEMS

## BACKGROUND

According to the International Organization for Migration, there were over 280 million international migrants in 2020, a number influenced by global crises such as conflicts, economic instability, and disasters, and positive factors like labor migration and free movement agreements. Migration drivers include water stress, extreme weather events, energy poverty, and food insecurity. This surge in migration trends also impacts host nations, particularly in regions already facing resource scarcity challenges. Anticipated climate change and population growth will exacerbate these challenges, causing nonlinear impacts across water, energy, and food systems. Migration can also contribute positively to all aspects of economic, environmental, and social development and is key to achieving the Sustainable Development Goals (SDGs). The 2030 Agenda for Sustainable Development recognizes the intricate interdependencies among these resource systems, but their complex relationships with migration (forced, economic, rural-urban, internal, and cross-border) remain insufficiently addressed. Understanding the connections between migration and key environmental resources (e.g., water, energy, and food) including how resource scarcity influences migration needs further study.

Existing Water-Energy-Food nexus models often fail to capture the nuanced interplay between conflicts and migration. Nexus communities from across the globe search for better tools to understand these trends and interconnections and guide anticipatory action toward improving the resilience of communities facing these pressures. Moreover, there is a need to understand the impact of the various underlying conditions and vulnerabilities on amplifying disaster risks related to water, energy, and food systems that contribute to migration. Also, connecting the vulnerability and resilience of resource systems (primarily water, energy, and food) with the nexus still needs to unravel solutions for long-term sustainable development. The webinar series aims to fill this gap.

## OBJECTIVES

This webinar series aims to catalyze cross-disciplinary, cross-institutional, and international dialogues toward understanding the knowledge gaps and opportunities in taking a holistic, systems approach to addressing these tightly interconnected challenges. With a focus on water, energy, and food systems, the webinar series will also consider other key environmental resources like climate, land, and ecosystems.



## OUTCOMES

The webinar series is envisioned to facilitate the development of a common framework and road map for integrating migration in nexus assessment tools. This would contribute to exploring and developing anticipatory tools and strategies incorporating migration dynamics into nexus assessments, aiming to guide policymakers, researchers, and practitioners toward evidence-based, sustainable, and resilient solutions.



## WEBINAR 4 PROGRAM

- **Introduction**

## Building Nexus Resilience Webinar Series - Reflections and Lessons Learned

**Bassel Daher**, Assistant Director for Sustainable Development, Texas A&M Energy Institute; SustainFood Network, International Water Resources Association (IWRA)

- **Panel and Moderated Discussion**

## ➤ Human mobility in the context of climate change in West and Central Africa- From fair narrative to concrete action

**Hind Aïssaoui Bennani**, Regional Thematic Specialist on Migration, Environment, Climate Change, part of the Regional Office of West and Central Africa, IOM

## Climate-Induced Migration: Case Study from Southern Indus Basin in Pakistan

**Mohsin Hafeez**, Strategic Program Director – Water, Food and Ecosystems, IWMI

## ➤ Applying a nexus approach to climate action planning: the climate change, rural livelihoods and human mobility nexus

**Giorgia Prati**, Migration and Climate Change Specialist, FAO

➤ **Beyond Technology: How the WEFE Nexus Strengthens Resilience to Migration and Conflict in Fragile Systems?**


**Ali Rhouma**, Project Officer, PRIMA Foundation




 **Bassel Daher**  
Texas A&M Energy Institute,  
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International Migration  
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 **Mohsin Hafeez**  
International Water  
Management Institute (IWMI)


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 **Giorgia Prati**  
Food and Agriculture Organization  
of the United Nations (FAO)

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 Ali Rhouma  
PRIMA Foundation

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## Webinar 4 - Special Session Recording



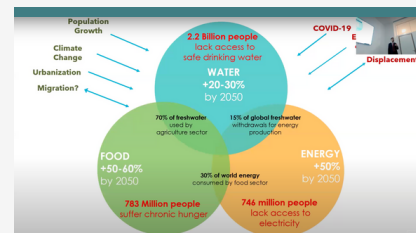
## Webinar 4 - Special Session Slides



## Conference Details

# KEY TAKEAWAYS

- Addressing WEFE challenges requires integrated solutions that consider their impact on **migration dynamics**, **socioeconomic fragmentation**, **sociocultural dynamics**, and **sociopolitical volatility**.
- Integrating WEFE Nexus assessments with migration models** presents significant opportunities for a better understanding of how resource insecurities may contribute to **migration**, particularly in vulnerable regions. However, achieving this integration requires addressing challenges related to **theory**, **data compatibility** and **model resolution**.
- Current migration models often focus on **physical factors** like water and crops, overlooking key social and economic drivers. Greater emphasis is needed on social networks, culture, and governance, which strongly influence migration choices
- Without **holistic and targeted support** and interventions that address the root causes of vulnerability in rural areas, migration may present challenges for populations left behind that can hinder its potential to build long-term resilience.



## WEBINAR'S GUIDING QUESTIONS

- How can a **Nexus approach** help us better understand and respond to the **complex drivers** of mobility, including **environmental change**, **economic shifts**, and **conflict**?
- What lessons can be drawn from global case studies where **Nexus-based solutions** have been successfully applied to support community resilience?
- How can **cross-sectoral collaboration** and **integrated resource management** strategies be operationalized to enhance stability and well-being in both areas of **out-migration** and receiving communities?
- What are the **key barriers** to implementing **Nexus-driven approaches** in policy, investment, and infrastructure planning, and how can they be overcome?
- How can **Nexus/systems thinking** be embedded into broader governance frameworks to improve long-term planning, resource allocation, and institutional coordination for regions experiencing population shifts?

## HUMAN MOBILITY IN THE CONTEXT OF CLIMATE CHANGE IN WEST AND CENTRAL AFRICA: FROM FAIR NARRATIVE TO CONCRETE ACTION

- In 2023, **over 285,000 people** were **internally displaced** in West and Central Africa due to disasters like floods, storms, and landslides. This represented about 3% of all **internally displaced persons** in the region.
- In 2025, the numbers are expected to rise, particularly due to major floods recently observed in the Sahel and Chad.
- Slow-onset environmental events (land degradation, desertification, water scarcity, sea level rise) and immobility are underestimated and overlooked, despite being crucial to understanding the full scope of climate-driven human mobility.
- 32 million people** may be displaced due to slow-onset events **by 2050**, without considering sudden disasters like floods.
- Migration is multi-causal and occurs in the context of climate change, which exacerbates vulnerabilities, inequalities, and conflicts.
- Migration should be viewed as a legitimate climate adaptation strategy, but it needs to happen in an orderly and safe manner.
- IOM's three-pillar approach** promotes (1) integrating human mobility into climate policies through a **whole-of-government strategy**, (2) grounding decisions in data and local community perceptions to ensure **evidence-based action**, and (3) engaging communities through just transitions and nature-based solutions that uphold the rights of both migrants and host populations.

### 4.1.1 Strategic Objective 1

"We develop solutions for people to move."

### 4.1.2 Strategic Objective 2

"We develop solutions for people on the move."

### 4.1.3 Strategic Objective 3

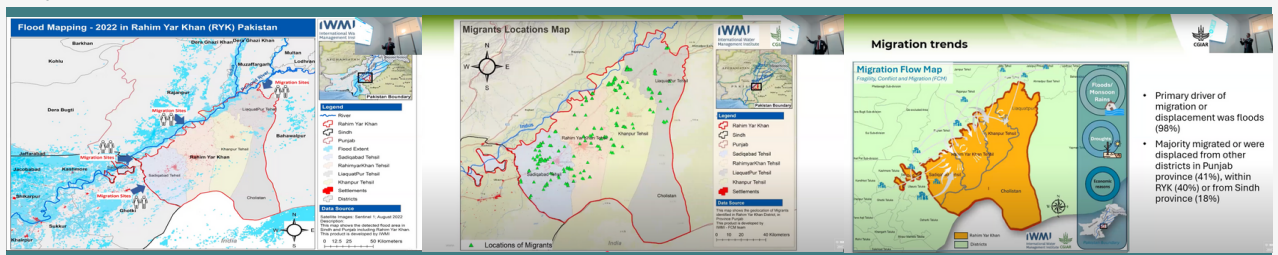
"We develop solutions for people to stay."

IOM 2021



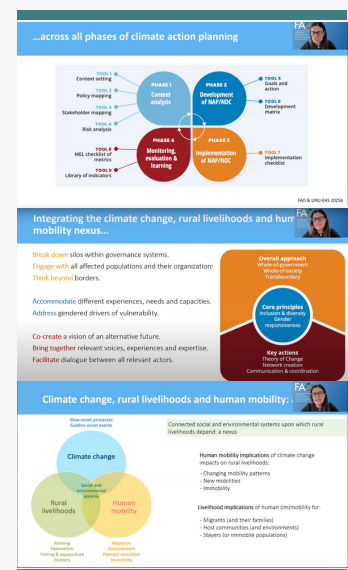
## CLIMATE-INDUCED MIGRATION: CASE STUDY FROM SOUTHERN INDUS BASIN IN PAKISTAN

- In 2022, over **647,000 people** were displaced due to flooding; in 2023, over **1.2 million** were displaced by **climate disasters** across Pakistan.
- Estimated **\$15 billion in economic losses** were recorded due to the 2022 floods.
- Climate-induced migration** remains **underrecognized** by policymakers, often addressed as an separate policy domains, which weakens long-term resilience strategies.
- In Pakistan, **policy and planning frameworks** overlook the link between climate change and migration.
- Gender plays a critical role in shaping access to water and food and must be considered in policy responses, as **women** are often **more vulnerable during disasters**.
- Vulnerable communities already facing **water, food, and socio-economic challenges** experienced worsened compound vulnerabilities after the floods, with **women disproportionately affected**.
- There is a need for more **proactive planning (anticipatory action)** and better alignment between National Adaptation Plans (NAPs) and migration policies, rather than relying only on immediate humanitarian responses after disasters.



## APPLYING A NEXUS APPROACH TO CLIMATE ACTION PLANNING: THE CLIMATE CHANGE, RURAL LIVELIHOODS AND HUMAN MOBILITY NEXUS

- Agriculture sustains many of the world's poorest, with over **80% of the food-insecure** living in rural areas reliant on natural resources.
- The nexus of climate change, livelihoods, and mobility is under-addressed in climate adaptation policies.
- Climate shocks are placing severe pressure on agri-food systems, threatening livelihoods and food security.
- Droughts cause **65% of agriculture-related losses** in developing countries.
- Climate shocks **increase forced migration and immobility** due to lack of adaptive capacity.
- Migration outcomes vary across gender, age, and social identity.
- Policies** are designed in **silos**, lacking coordination across sectors and governance levels.
- FAO and UNU-EHS developed a **guiding framework and toolkit** to help integrate mobility into National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs).
- There is an urgent need to better coordinate **NAPs, NDCs, and migration policies**, as they are often developed in isolation and overlook the links between climate impacts, livelihoods, and human mobility.



**Mobility** in 53 National Adaptation Plans (NAPs):

**85%** mention some form of **human mobility**.  
**66%** include **actions** to address **human mobility**.

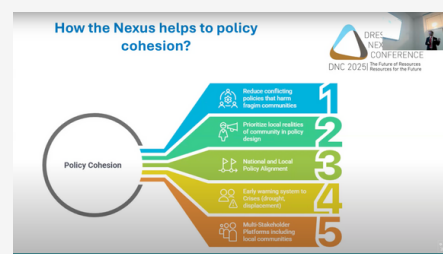
**Mobility** in 156 Nationally Determined Contributions (NDCs)

**39%** mention some form of **human mobility**.

**Immobility is still a blind spot in NAPs and NDCs**

## BEYOND TECHNOLOGY: HOW THE WEFE NEXUS STRENGTHENS RESILIENCE TO MIGRATION AND CONFLICT IN FRAGILE SYSTEMS?

- The **WEFE Nexus** is a powerful enabler of resilience in fragile systems, providing **integrated solutions** that address interlinked water, energy, food, and ecosystem challenges while also mitigating drivers of conflict and migration.
- **Community-centered approaches** are essential, putting local knowledge, capacities, and priorities at the heart of planning ensures that interventions are inclusive, practical, and sustainable.
- Dialogue, training, and education are essential to raise awareness and build trust between authorities and rural communities.
- Empowering women and rural actors through targeted policies, training, and cooperative governance enhances social cohesion and economic resilience, especially in remote and vulnerable areas
- **Cross-sectoral policy coherence** and **participatory tools** co-developed with farmers and local stakeholders can improve climate-resilient resource management and boost adoption at grassroots levels.



### WEBINAR'S DISCUSSION HIGHLIGHTS



- **Fragmented governance** weakens resilience; **Integrated, cross-sector planning** is essential for effective climate adaptation and mobility responses.
- **Coordination mechanisms** need to be institutionalized to **align policies** and ensure coherent responses to **climate impacts on livelihoods and mobility**.
- Migration is both a **risk and a resilience strategy**; It should be integrated into climate and rural development plans to strengthen **long-term adaptation**, while also addressing the vulnerabilities of those unable to move.
- Rural, remote, and marginalized groups—especially women and small farmers—must be meaningfully included in decision-making. Local knowledge, priorities, and participation are vital for sustainable, inclusive solutions.
- **Nexus approach** encourages **multi-stakeholder collaboration**, long-term solutions, and recognizes both the **opportunities** and **trade-offs** that come with migration as adaptation.



### OPEN RESEARCH QUESTIONS

- What are the long-term implications of immobility in areas of high climate vulnerability, and how should this be addressed in current mobility and development frameworks?
- What institutional and governance mechanisms are needed to break down policy silos and ensure that climate, migration, and food systems planning are aligned?
- What methodologies are most effective for quantifying the trade-offs between short-term humanitarian responses and long-term resilience planning in migration areas?
- How can digital tools and participatory platforms be used to elevate local knowledge and enable marginalized communities to codesign relevant climate resilience strategies?



### ADDITIONAL RESOURCES

- [Institutional Strategy on Migration, Environment and Climate Change 2021–2030](#)
- [Integrating human mobility through a rural livelihood lens into national adaptation and mitigation planning – Guiding Framework](#). Rome: Food and Agriculture Organisation of the United Nations.
- [Integrating human mobility through a rural livelihood lens into national adaptation and mitigation planning – Toolkit](#). Rome: Food and Agriculture Organisation of the United Nations.
- [Acting on loss and damage: Linking rural livelihoods and climate mobility in adaptation and mitigation planning, Researching Internal Displacement](#).
- [In agrifood systems, not everyone's experience is equal: The status of women in agrifood systems](#)
- [The Unjust Climate: Measuring the impacts of climate change on rural poor, women, and youth](#)

For more information, check out:

**WEBINAR SERIES WEBPAGE**