THE CHALLENGES OF CLIMATE-INDUCED MIGRATION

THE CASE OF UGANDA

THE STEP TOOLKIT: SKILLS & TOOLS FOR EMPOWERED PATHWAYS — TRANSFORMING INTERNAL MIGRATION FROM A CRISIS RESPONSE INTO A CATALYST FOR REGIONAL ECONOMIC

TEAM: NORTH AMERICA AND OCEANIA.

THE GENEVA CHALLENGE 2025

ABSTRACT

In Uganda, climate change is increasingly driving internal migration, particularly affecting populations already living in poverty and facing structural vulnerabilities. Recurrent floods have severely impacted agriculture, livestock, and fisheries, undermining livelihoods and forcing smallholder farmers, women, and youth to seek safety and economic opportunities elsewhere. This form of climate-induced migration represents a survival response rather than a voluntary choice. However, without inclusive public policies and institutional support, such migration often leads to increased pressure on urban infrastructure, services, and labor markets, exacerbating poverty and instability. This project examines how climate variability affects internal migration patterns and identifies key gaps in Uganda's public policy response. It introduces a two-part solution – 'The STEP Toolkits – Skills & Tools for Empowered Pathways' -that addresses both demand- and supply-side drivers through the STEP Community Toolkit and the STEP Municipality Toolkit. The Community Toolkit supports vulnerable populations before displacement, offering targeted modules on economic and livelihoods empowerment, legal and financial preparedness, service access, and gender-specific protection. The Municipality Toolkit equips local governments with tools for migration forecasting, economic opportunity mapping, and cross-sector coordination. Together, these toolkits offer a comprehensive and forward-looking approach to managing climate-induced migration with resilience and dignity.

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01

FRAMING THE PROBLEM:

STRUCTURAL PRESSURES

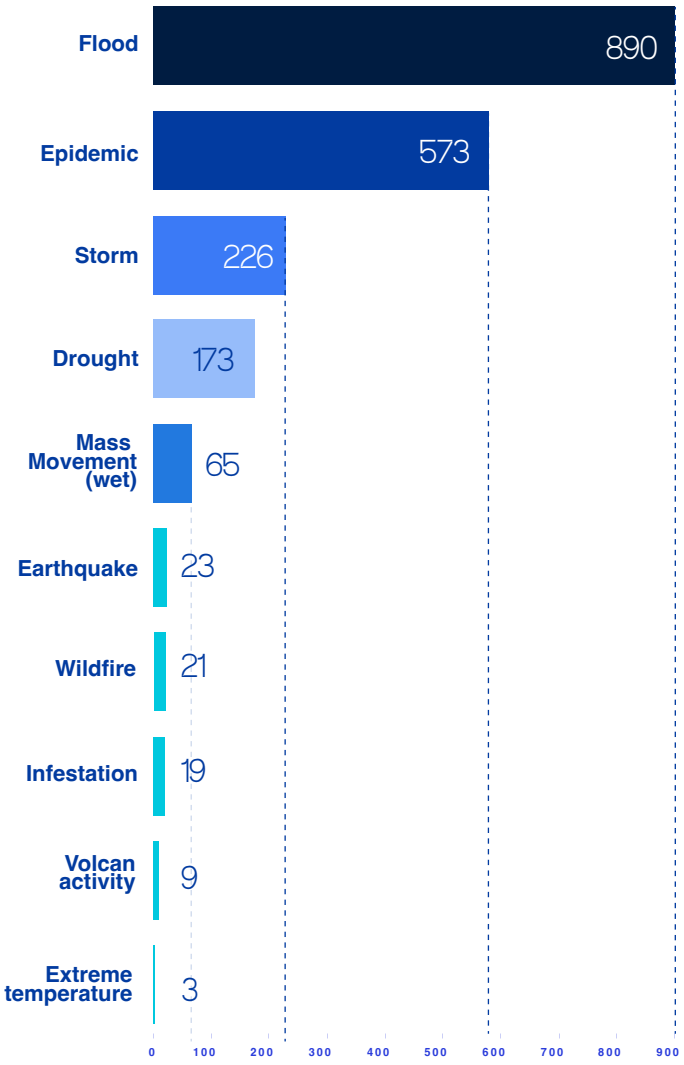
Climate change presents significant and urgent development challenges on a global scale, with migration emerging as a critical issue that demands immediate attention. Climate change is causing more frequent natural disasters, which may force many people to relocate from areas affected by these disasters.

Climate change and demographic shifts are the two primary drivers of transformation in migration patterns over the next 30 years[1]. It is estimated that internal climate migration worldwide could increase by 44 million to 216 million people by 2050, depending on various climate, demographic, and development scenarios[2]. The highest numbers of climate migrants are expected to be in Sub-Saharan Africa (SSA), with up to 86 million internal migrants by 2050. Within this region, there is variability, and estimations report that the top three countries with the most expected internal climate migration are, in order, Tanzania, Uganda, and Niger[3].

Sub-Saharan Africa is the most climate-vulnerable region in the world. Its geography and environmental exposure make it disproportionately vulnerable to disasters such as floods, droughts, and desertification. Flooding is the most frequent natural disaster in the Sub-Saharan region, accounting for over half of all climate-related events in the region between 2000 and 2025 (Figure 1).

FIGURE 1:
FLOODS: SSA'S TOP THREAT

MOST COMMON DISASTERS
IN SUB-SAHARAN AFRICA (2000 - 2025)

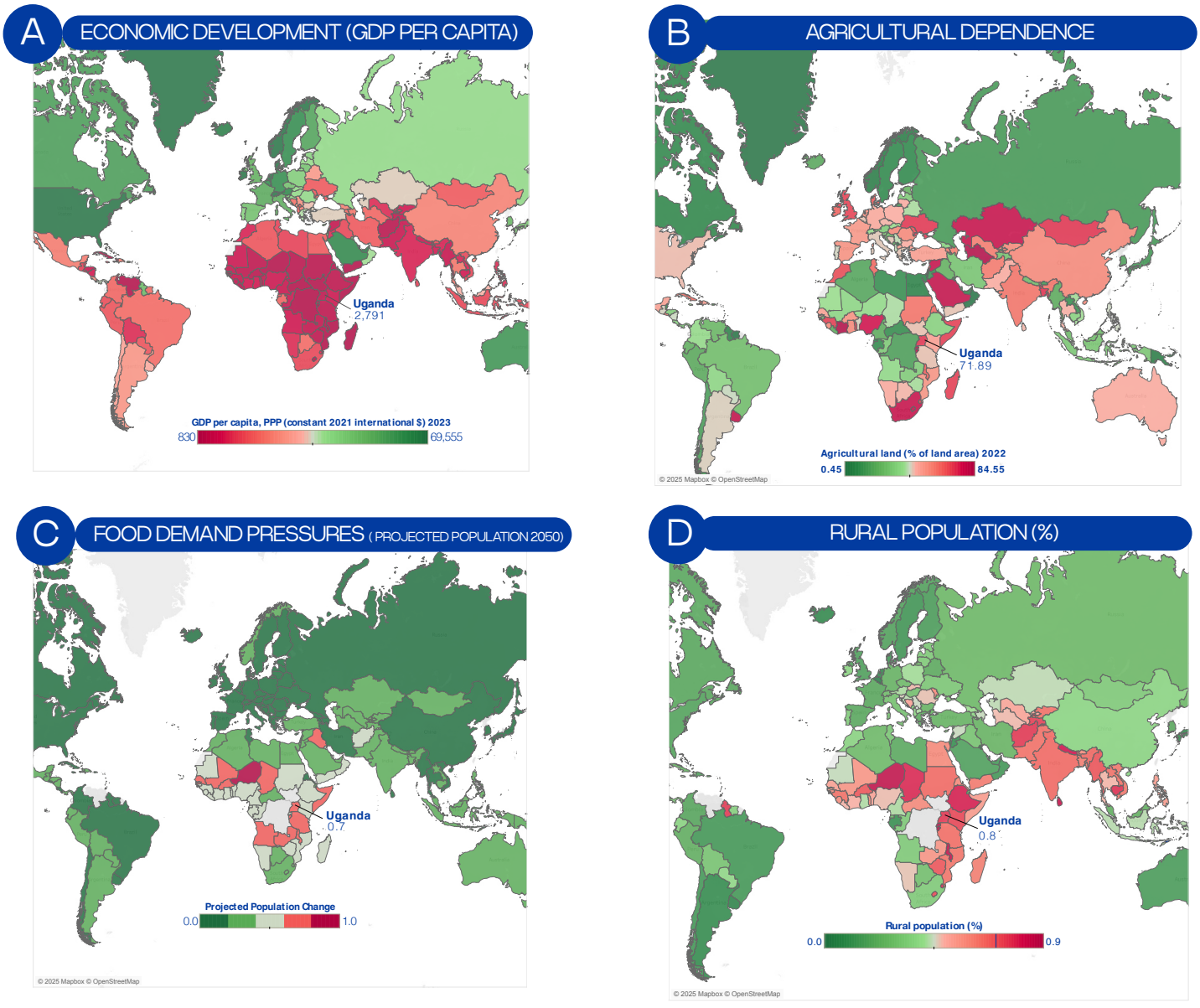


Source: EM-DAT - The international disaster database; authors' elaboration.

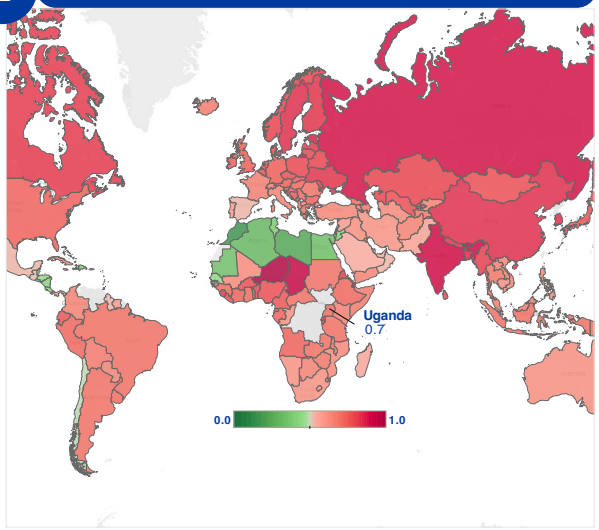
[1] (World Bank, 2023)
[2] (Clement et al., 2021)
[3] (Rigaud et al., 2021; World Bank, 2021)

Yet, the challenge extends beyond that (Figure 2). The region faces multifaced structural vulnerabilities, including extremely low levels of economic development (A) and high dependence on agriculture (B), which means a large part of the population relies directly on land and rainfall cycles to survive. Additionally, it's also where the pressure from projected population growth is the highest (C), which will only increase food demand and further strain already weak systems. Most of the population still lives in rural areas (D), where access to services and infrastructure is limited. And while flood hazards are projected to intensify (E), many countries lack the adaptive capacity to cope with them (F). Together, these structural pressures make the region particularly vulnerable to climate shocks, leaving millions with little choice but to relocate.

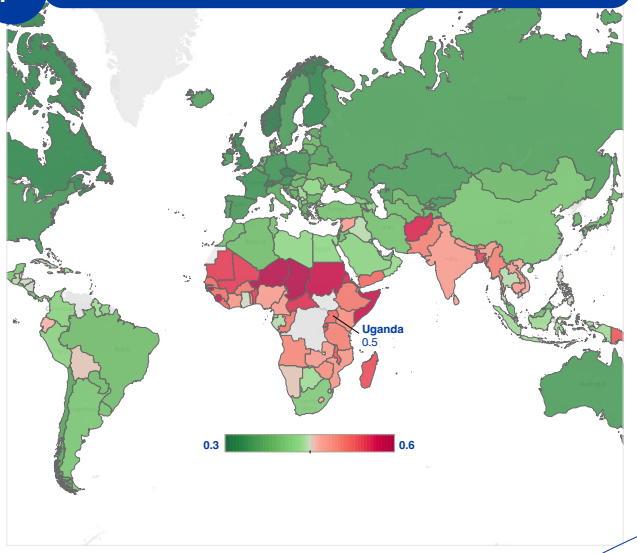
FIGURE 2:
SSA AND UGANDA STRUCTURAL PRESSURES AT THE HEART OF CLIMATE MIGRATION



E PROJECTED FLOOR HAZARD



F CLIMATE VULNERABILITY



Sources: World Bank Database and University of Notre Dame Global Adaptation Initiative; authors' elaboration.

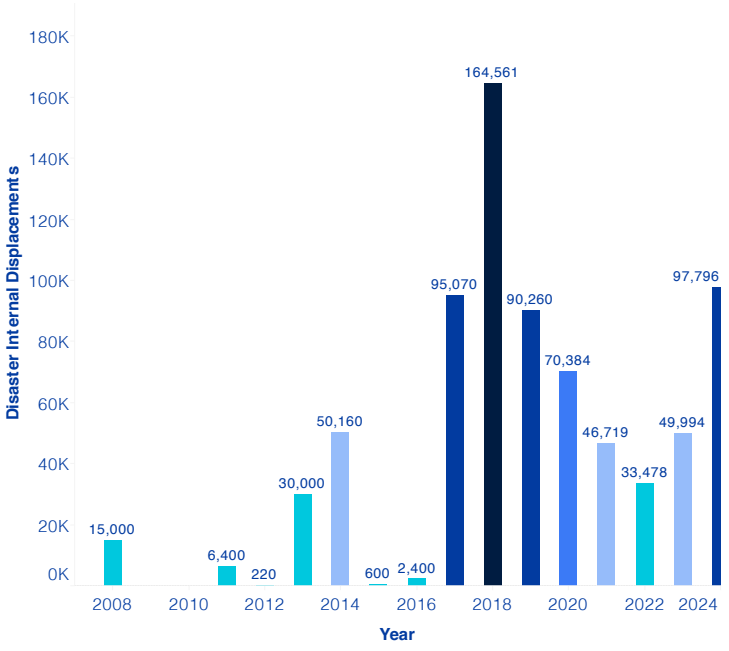
02

UGANDA IN FOCUS

Our proposal will focus on Uganda, a country that, as illustrated in Figure 2, faces all the underlying problems and climate migration pressures characteristic of the SSA region. In particular, Uganda is the second country with the highest forecasts for internal climate migration, and flooding is the primary natural disaster leading to internal displacement (Figure 3).

FIGURE 3: UGANDA´S INTERNAL DISPLACEMENT CRISIS IS FLOOD-DRIVEN

INTERNAL DISAPLACEMENTS DUE TO DISASTERS

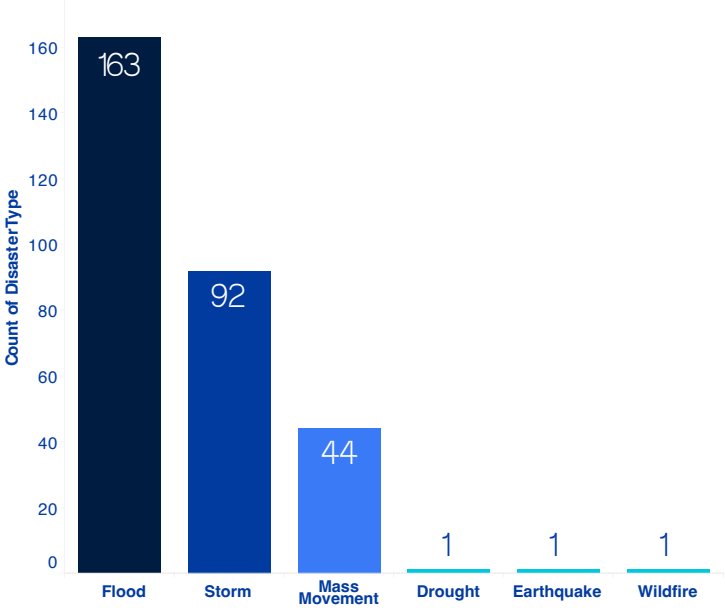


[4] *(International Organization for Migration [IOM]., 2022)*

Source: IDMC: Internal Displacement Monitoring Center; author's elaboration

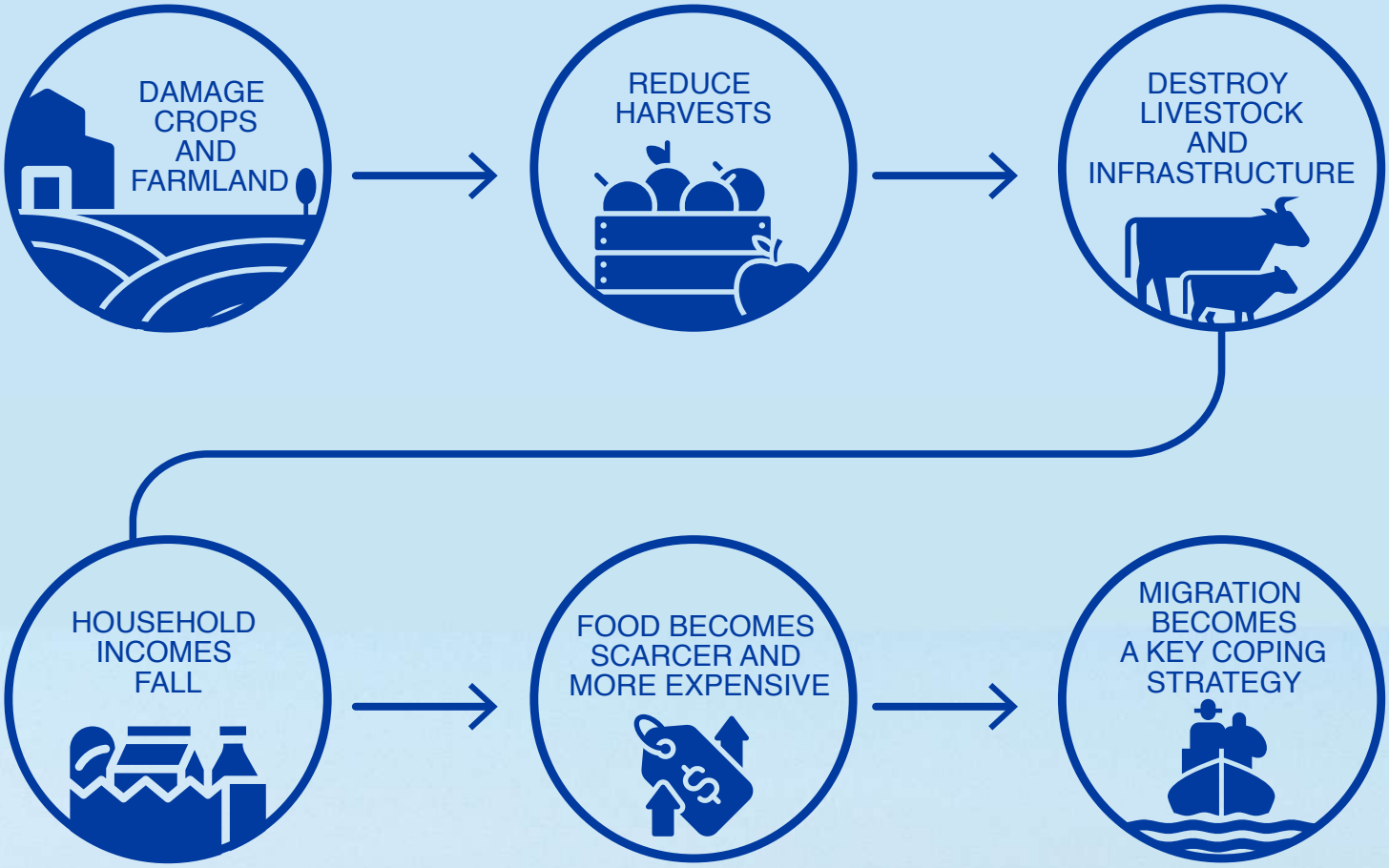
FIGURE 3: UGANDA´S INTERNAL DISPLACEMENT CRISIS IS FLOOD-DRIVEN

TOP DISASTER TYPES BEHIND INTERNAL DISPLACEMENT IN UGANDA (2008-2024)



In Uganda, around 81% of the working population relies on rain-fed agriculture, which contributes 40% to the country's GDP and accounts for over 90% of its export earnings. Moreover, more than half (53.9%) of rural households rely on subsistence farming for their livelihoods[4]. Consequently, floods have become a major climate shock with far-reaching consequences. These recurrent floods damage crops and farmland, reduce harvests, and destroy livestock and infrastructure. As a result, household incomes fall, food becomes scarcer and more expensive, and people lose their primary means of survival. When these shocks occur repeatedly and recovery is limited, migration becomes a key coping strategy, especially for smallholder farmers, women, and young people who are the least able to absorb losses. Rather than a one-time disaster, floods trigger a chain reaction: first affecting agriculture, then undermining incomes, and ultimately deepening food insecurity, which pushes people to leave their homes in search of better conditions (Figure 4).

FIGURE 4:
FLOOD IMPACTS AND THE PATHWAY TO CLIMATE-INDUCED MIGRATION



Source (International Organization for Migration (IOM, 2022), author's elaboration

Climate-induced migration takes many forms, including rural-to-urban migration, cross-border displacement, and seasonal migration in search of employment. The most affected are those who are least equipped to adapt, including smallholder farmers without savings, women with limited land rights, and young people facing unemployment. Floods, in particular, can displace people from flood-prone lowlands into crowded informal settlements, which are themselves highly vulnerable to future shocks. As this cycle repeats and support systems remain weak, climate shocks compound vulnerabilities and increase displacement. If no action is taken, both the scale and severity of migration are likely to grow.

2.1 CLIMATE IMPACTS AND SECTORAL EVIDENCE

In 2020, severe rains caused floods and landslides that displaced 87,000 people and damaged infrastructure. Key staple crops, such as cassava, maize, sweet potatoes, and beans, are vulnerable to excess water, with cassava potentially experiencing yield reductions of up to 40% by 2050, resulting in estimated losses of USD 1.5 billion. Coffee, Uganda's main export, is also at risk, with forecasts predicting a 50–75% reduction in arabica yields due to flooding and climate change[5].

The 2020 locust outbreak, the worst in 25 years, severely impacted staple crop production and livestock systems, with livestock mortality accounting for up to 57% of flood-related damages, especially in pastoralist communities[6]. This threat to household income and long-term food security was compounded by subsequent droughts that destroyed water sources, particularly in Uganda's "Cattle Corridor." Additionally, fishing communities around Lake Victoria face declining fish stocks and environmental degradation due to flooding and rising water temperatures, jeopardizing their food supply and economies.

2.2 VULNERABLE POPULATIONS AND MIGRATION PRESSURES

People living in poverty and marginalized communities are among the most vulnerable when a natural disaster strikes. In Uganda, poverty rates are significantly higher in the eastern regions, at 74.2% in Karamoja and 29.9% in Bukedi, compared to 1.1% in Kampala[7]. These areas are projected hotspots of internal climate migration, where poverty, fragility, and climate impacts intersect[8]. For example, the Nakapiripirit district in Karamoja is expected to see over 11,000 people leave by 2050 in a pessimistic forecast scenario[9]. Similarly, districts in the Bukedi subregion, such as Pallisa, Budaka, and Tororo, are identified as strong emitters of climate migrants. On the other hand, urban centers like Kampala are projected to receive the most significant number of internal climate migrants, with estimated inflows exceeding 110,000 by 2050. This growing rural-to-urban migration will place increasing pressure on housing, jobs, and public services in already strained urban environments.

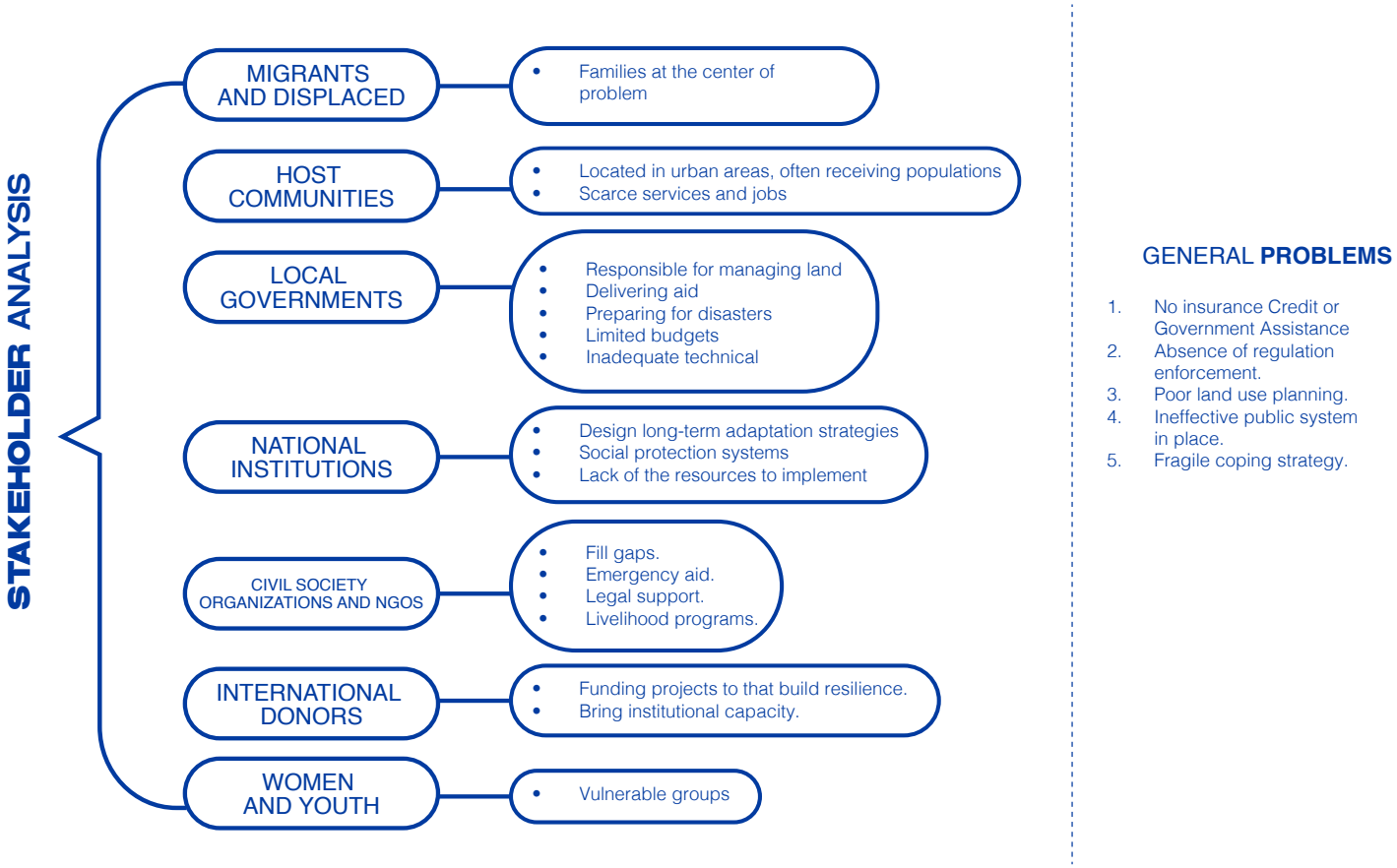
In this context, smallholder farmers and rural communities are at the highest risk, as over 95% of cultivated land in Uganda relies on rain-fed, subsistence agriculture, making agricultural production extremely vulnerable to floods and droughts. Since approximately 81% of the population depends on this type of farming for their livelihoods, climate variability poses a direct and widespread threat to income and food security. In addition, pastoralists, who comprise approximately 10% of the Ugandan population, face increasing mobility constraints due to drought and land degradation, often resulting in tensions over scarce resources. Finally, urban informal settlers, especially in Kampala, are exposed to flooding, as over 90% of informal settlements are located in wetlands[10].

Women are especially impacted, despite comprising 70% of the agricultural workforce[11], only 27% own land, and less than 20% control agricultural income[12]. Limited access to resources and services restricts their resilience, while displacement increases risks of gender-based violence, food insecurity, and lack of access to education and healthcare[13]. Additionally, children and youth represent another critical group. With a median age of 16.7 years, Uganda's population is relatively young[14]. Around 75% of youth are employed in agriculture[15], and children account for 41% of refugees, facing educational disruptions and vulnerability to abuse in displacement settings[16]. These interconnected challenges underscore the diverse range of stakeholders affected by and involved in climate-induced displacement in Uganda, including migrants, host communities, government institutions, and civil society organizations (Map 1).

5 (IOM., 2022)
6 (IOM., 2022)
7 (UNHS, 2023/24).
8 (Rigaud et al., 2021; World Bank, 2021)
9 Combination of high greenhouse gas emissions (RCP8.5) and uneven development (SSP4).
10 (IOM & UNDP., 2022: Climate-Migration Nexus in Uganda).
11 (IOM., 2022)
12 (FAO & UN Women., 2020; ODI & FAO., 2021).
13 (Rigaud, K, 2021a & IOM., 2022)
14 (UBOS, 2024)
15 (ILO & UBOS, 2025)
16 (UNHCR, 2023; Labour Migration Statistics Uganda, 2025).

MAP 1: DISPLACEMENT: ROLES AND RISKS

author's elaboration



2.3 LANDSCAPE OF MIGRATION AND DISPLACEMENT SOLUTIONS IN UGANDA

Building on the understanding of who is most affected by climate-induced displacement and the diverse stakeholders involved, this section outlines the existing policy and programmatic landscape in response to these migration pressures in Uganda (Figure 5). It also highlights the roles of key actors, particularly government institutions and NGOs, in shaping and implementing these responses, while identifying critical gaps and potential areas for contribution across six key dimensions[17].

[17] *A detailed summary table of the existing policies and their main description is available on Annex 1*

FIGURE 5: EXISTING AID FRAMEWORKS AND GAPS IN ADDRESSING INTERNAL AND CLIMATE-INDUCED MIGRATION IN UGANDA.

author's elaboration

While existing policies and programs reflect significant efforts across various dimensions, they remain fragmented and largely reactive, particularly about internal climate migration. To design more proactive and inclusive solutions, it is essential to understand the dual pressures shaping migration: climate and structural shocks that displace people from rural areas, and the limited capacity of municipalities to receive them. The following section maps these pressures and offers a diagnosis of the drivers and absorption challenges at the heart of Uganda's climate mobility landscape.

03

FROM SHOCK TO SHIFT:

MAPPING THE PRESSURES BEHIND DISPLACEMENT

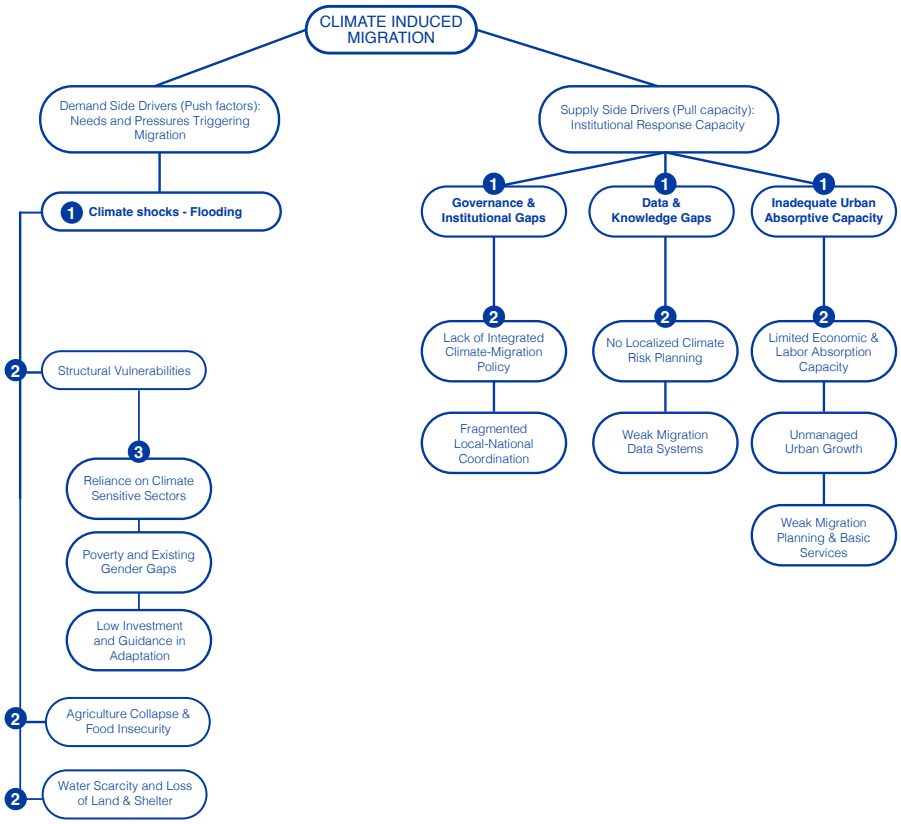
In summary, climate-induced migration in Uganda is driven by a combination of increasing climate shocks and ongoing structural vulnerabilities that weaken resilience in the areas people are leaving. Conversely, the municipalities receiving these migrants face significant challenges in planning for and integrating new populations, due to limited job opportunities, inadequate services, and fragmented policy coordination. Understanding these dual pressures is crucial, not only to anticipate displacement but also to develop targeted, place-based responses that turn migration into a catalyst for inclusive development.

Map 2 presents a layered analysis of climate-induced migration, focusing on two main aspects: the push factors in sending areas and the absorption challenges in receiving municipalities. On the left side, push factors arise from recurring climate shocks—especially floods—that result in agricultural failure, water scarcity, and the degradation of rural livelihoods. These issues are exacerbated by structural vulnerabilities, including widespread poverty, gender inequalities, dependence on rain-fed agriculture, and inadequate investment in adaptation strategies. On the right side, receiving areas are often unprepared to accommodate displaced populations, facing limited job opportunities, inadequate infrastructure, and gaps in institutional coordination. This imbalance between the forces driving people away and the systems struggling to support them is at the core of Uganda's climate migration challenge. Any effective response must address both aspects of this equation.

MAP 2:

DIAGNOSTIC FRAMEWORK: DEMAND- AND SUPPLY-SIDE DRIVERS OF CLIMATE -INDUCED MIGRATION

author's elaboration



04

PROPOSED SOLUTION IN DETAIL

To address the inevitable challenges faced by internal migrants confronting climate-related risks in rural Sub-Saharan Africa, the proposed intervention is built around a two-faceted solution that addresses both sides of the climate mobility challenge:

Upstream, by equipping migrants and displaced populations—especially vulnerable groups like women and youth—with the tools and support to relocate safely and proactively.

Downstream, by strengthening the capacity of local governments and host communities to absorb and integrate new arrivals in ways that promote inclusive development and avoid exacerbating urban vulnerabilities.

Unlike many current responses that attempt to prevent migration altogether, this solution starts from the premise that climate-induced internal migration in Uganda is inevitable. As environmental pressures escalate, populations will be forced to move—often abruptly and without preparation—leading to loss of livelihoods, breakdowns in service access, and growing pressure on already stretched urban systems.

At the core of our response is the STEP Toolkit – Skills & Tools for Empowered Pathways, a Pre-Displacement Readiness Toolkit that enables communities to anticipate, prepare for, and navigate climate-related relocation in a way that is safe, informed, and dignified. This modular toolkit is also designed to work in tandem with receiving municipalities, ensuring they have the tools to absorb new populations while leveraging migration as a catalyst for inclusive regional development.

Together, these two complementary pillars form a comprehensive solution that not only reduces vulnerability but actively transforms displacement into an opportunity for individuals and the country's economic transformation.

The STEP Toolkit is delivered through two core axes of intervention, each targeting one side of the migration equation:

THE STEP TOOLKITS SKILLS & TOOLS FOR EMPOWERED PATHWAYS →

4.1 INTERVENTION AXIS 1: EQUIPPING AT-RISK COMMUNITIES BEFORE DISPLACEMENT

This axis focuses on preparing individuals in rural communities that are most vulnerable to climate-induced displacement, with a particular emphasis on women and youth. Recognizing that internal migration often occurs under conditions of crisis and disempowerment, this intervention aims to transform displacement into a managed and opportunity-driven process. It achieves this by equipping at-risk populations with the legal, financial, and practical tools necessary for safe relocation and long-term integration into urban economic life.
The STEP Community Toolkit is delivered in two tiers:

4.1.1 **TIER 1:** FIVE-DAY PRE-DISPLACEMENT WORKSHOP

The first tier consists of an intensive five-day training program designed to reach individuals residing in climate-affected areas. The curriculum is organized around four foundational pillars essential for preparing for migration:

1. Livelihoods and Economic Security
Participants are introduced to the basics of economic transition, including how to assess the transferability of their existing skills and prepare for urban employment in emerging sectors. Key components include:

- Understanding labor market dynamics and urban job access.
- Preparing for disruptions to income, property, or agricultural assets;
- Distinguishing between short-term humanitarian support and pathways to long-term self-reliance.

2. Legal and Financial Preparedness
This module provides participants with critical knowledge of their rights and legal status under national and local frameworks. It also covers strategies for financial resilience and protection against exploitation. Topics include:

- Legal categories (e.g., internally displaced persons, migrants, asylum seekers) and associated rights
- Importance of documentation (ID, land titles, education records) for access to services
- Tools to avoid predatory lending, debt traps, and informal networks

3. Urban Orientation and Access to Basic Services

Participants receive practical guidance on navigating urban life, with a focus on informal settlements where newly arrived populations are most likely to reside. Key issues addressed include:

- Accessing shelter, food, clean water, and public health services
- Registration for schools, health posts, and water access points
- Navigating the roles of government institutions and humanitarian actors in urban settings

4. Gender-Specific Protection and Inclusion

Given the differentiated impact of displacement on women and girls, this module addresses their specific needs and risks. Content includes:

- Understanding and mitigating the risks of gender-based violence
- Health services and hygiene for women in displacement contexts
- Financial literacy and safer livelihood options tailored to women's realities

4.1.2 **TIER 2:** SKILLS-FOR-TRANSITION PROGRAMS LINKED TO ECONOMIC OPPORTUNITIES.

Following the initial workshop, participants will be enrolled in second-tier training programs voluntarily, which will last three to six months. These programs are customized based on pre-identified economic sectors and geographic destinations, mapped in coordination with municipal authorities (see Intervention Axis 2).
The goal of this tier is to equip participants with the technical skills and knowledge necessary to integrate into viable economic sectors upon relocation. Training content is aligned with Uganda's industrial development priorities and guided by sectoral analysis derived from the Atlas of Economic Complexity. This ensures that displaced populations are not only mobile but are prepared to contribute to — and benefit from — the country's long-term economic transformation.

4.2 INTERVENTION AXIS 2: STRENGTHENING MUNICIPAL PREPAREDNESS AND ECONOMIC ABSORPTION.

This second intervention axis focuses on supporting selected municipalities in Uganda that are likely to receive internal climate migrants in the coming years. While most policy responses to internal displacement focus on the populations in movement, this axis acknowledges that receiving cities are often under-resourced, poorly informed about projected inflows, and insufficiently integrated into national strategies for managing climate-induced migration. Yet, these municipalities play a central role in ensuring the success or failure of migration as a pathway for human security and economic development.

Importantly, this intervention also contributes to a much-needed process of structural economic transformation. In Uganda, over 80% of the working population relies on rain-fed agriculture—an increasingly fragile sector due to floods, droughts, and shifting climate patterns. These recurrent shocks have devastating ripple effects, undermining food security, household income, and rural stability. By enabling migrants to access urban labor markets and by aligning municipal strategies with high-potential, less climate-sensitive economic sectors, this intervention helps shift both people and public investment toward more resilient and productive pathways. In doing so, it supports the long-term diversification of Uganda's economy and reduces dependency on vulnerable rural livelihoods.

The objective of this intervention is twofold:

1. To enable municipalities to anticipate and plan for incoming populations, and
2. To transform migration into a lever for regional economic growth by aligning urban planning, labor markets, and public investment strategies.

To support this objective, five secondary cities outside Kampala have been identified as priority hubs based on their current economic structure, urbanization potential, and capacity to absorb future migration flows:

GULU (NORTHERN UGANDA – COVERING ACHOLI, LANGO, AND KARAMOJA) [18]: A post-conflict trade and logistics center with growing agro-industry and education sectors. It already hosts migrants displaced by climate pressures (Karamoja) and benefits from major road upgrades such as the Gulu–Kampala highway (World Bank & UNHCR, 2021).

MBARARA (SOUTHWESTERN UGANDA – COVERING ANKOLE AND KIGEZI)[19]**:** Uganda's second-largest economic hub, serving as a dairy and agri-business corridor with road links to regional markets, attracting climate-smart migrants (World Bank, 2022).

MBALE (EASTERN UGANDA – COVERING BUGISU, BUKEDI, BUSOGA, SEBEI, AND TESO)[20]**:** A coffee-producing node in the Mount Elgon region, with new industrial zones and rail connectivity; safe lower-lying areas are suitable for resettlement of those displaced by landslides (Broeckx et al, 2018).

ARUA (NORTHWESTERN UGANDA – COVERING WEST NILE)[21]**:** A cross-border trade and humanitarian logistics hub that hosts refugees and is receiving infrastructure investment—power, services, and urban planning (UN-Habitat, 2019).

FORT PORTAL (WESTERN UGANDA – COVERING TORO AND BUNYORO)[22]**:**

A designated regional tourism city with green economy potential—ecotourism, agroforestry, and hydropower—in a stable climate zone (Banura, R., 2023).

18 *(World Bank & UNHCR, 2016)*
19 *(World Bank, 2021b)*
20 *(Broeckx, J. et al, 2018)*
21 *(UN-Habitat, 2019)*
22 *(Banura, R, 2023)*

4.2.1 FORECASTING MIGRATION FLOWS AND INFORMING URBAN PLANNING.

Municipalities will be provided with estimated figures of future climate-induced migration, based on existing projections that identify at-risk regions and expected displacement patterns resulting from flooding. These data serve as an entry point to inform early urban planning, enabling local authorities to anticipate population inflows, identify pressure zones, and begin adjusting service delivery and spatial development plans accordingly.
This approach ensures that host municipalities are proactively equipped to manage future arrivals, rather than reacting to displacement once it occurs.

4.2.2 ECONOMIC OPPORTUNITY MAPPING USING THE ATLAS OF ECONOMIC COMPLEXITY.

To align population absorption with long-term economic growth, the intervention employs the Harvard Growth Lab's **Atlas of Economic Complexity**[23] to identify strategic economic sectors (Table 1). This tool assesses:

- The diversity of productive knowledge in the country
- The proximity of new economic activities to existing capabilities.
- The complexity and wage potential of future sectors.

TABLE 1:

TOP STRATEGIC ECONOMIC SECTORS FOR UGANDA BASED ON THE ATLAS OF ECONOMIC COMPLEXITY

Source: Harvard Growth Lab's Atlas of Economic Complexity (2023)

Top 50 Products Based on Strategy Approach

Click on product names to explore in the Atlas

PRODUCT NAME	"NEARBY" DISTANCE	OPPORTUNITY GAIN	PRODUCT COMPLEXITY	GLOBAL SIZE (USD)	GLOBAL GROWTH 5 YR
Sauces and seasonings (2103 HS92)	◆◆◆◆◆	◐◇◇◇◇	◆◆◇◇◇	$18.1B	↑ 20.2%
Cereal foods (1904 HS92)	◆◆◆◆◐	◆◆◐◇◇	◆◆◇◇◇	$7.95B	↑ 6.4%
Confectionery sugar (1704 HS92)	◆◆◆◆◆	◐◇◇◇◇	◆◐◇◇◇	$15.8B	↑ 16.8%
Fruits and nuts, frozen (0811 HS92)	◆◆◆◆◆	◐◇◇◇◇	◆◐◇◇◇	$6.67B	↑ 20.9%
Other tubes, pipes and hollow profiles of iron or steel (7306 HS92)	◆◆◆◆◆	◐◇◇◇◇	◆◐◇◇◇	$26.4B	↓ 13.2%
Prepared explosives, except gunpowder (3602 HS92)	◆◆◆◆◆	◐◇◇◇◇	◆◐◇◇◇	$1.28B	↑ 20.7%
Beer (2203 HS92)	◆◆◆◆◆	◐◇◇◇◇	◆◐◇◇◇	$16.2B	↓ 10.5%

[23] *The Atlas of Economic Complexity is a tool developed by Harvard Growth Lab to visualize global trade data and identify strategic growth opportunities. Available at: https://atlas.hks.harvard.edu/*

Based on preliminary regional analyses and the application of the Harvard Growth Lab's Atlas of Economic Complexity, a proposed matching between municipalities and strategic sectors has already been conducted (Table 2). This matching considers each city's existing productive structure, endowments, and potential for diversification into higher-complexity products. It will be introduced for discussion and alignment with regional governments to ensure coherence with ongoing economic plans and priorities.

This step ensures that second-tier training programs (see Axis 1) are linked to real market opportunities and that investment efforts are targeted toward sectors with both growth potential and the capacity to absorb incoming populations.

TABLE 2:

MATCHING UGANDAN MUNICIPALITIES WITH STRATEGIC ECONOMIC SECTORS BASED

MUNICIPALITY	PROPOSED STRATEGIC SECTOR	JUSTIFICATION
Gulu	Confectionery sugar, prepared explosives	Agro-industrial base; corridor to South Sudan and K aramoja infrastructure projects
Mbarara	Cereal foods; beer production	Regional grain supply, cross-border trade, and agro-processing infrastructure
Mbale	Frozen fruits; sauces and seasonings	Elgon's fruit and spice belt; agro-industrial park
Arua	Iron and steel pipes, sauces, and seasonings	Refugee inflows, urban infrastructure demand, and a growing local market for processed food
Fort Portal	Sauces and seasonings; frozen fruits	Highland fruit cultivation, organic agriculture, and eco-tourism value chains

author's elaboration

4.2. 3 PUBLIC–PRIVATE COLLABORATION AND INSTITUTIONAL ALIGNMENT.

To support labor absorption and inclusive economic growth, the toolkit helps municipalities coordinate with public institutions and engage private firms operating in strategic sectors. Rather than mobilizing direct investment or leading implementation, this step focuses on enabling municipalities to:

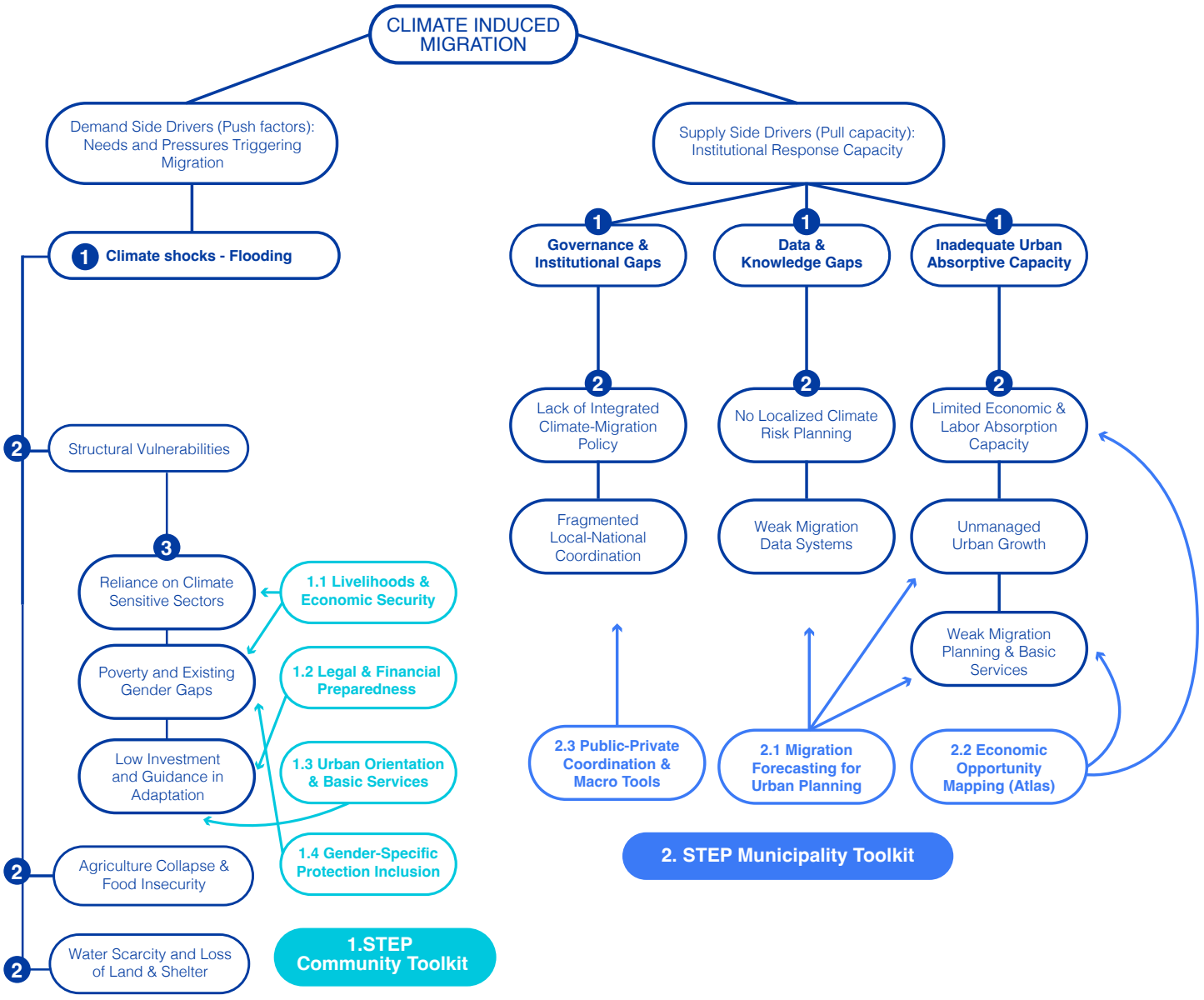
- Align with national investment frameworks by coordinating with line ministries and planning authorities
- Engage private sector actors in pre-identified sectors for early-stage collaboration and co-location opportunities
- Prepare investment briefs using toolkit templates tailored to local assets and economic potential
- Understand the basics of macroeconomic and public investment processes, enabling municipal actors to position local projects within broader policy and budgeting frameworks

The toolkit also introduces a phased planning approach for economic zones, providing municipalities with a step-by-step guide to prioritize land identification, basic service readiness, and collaboration with line ministries or utility providers. In pilot sites, closer support may be provided to demonstrate feasibility and create institutional momentum for government uptake and budgeting.

MAP 3:

THEORY OF CHANGE MAP:
ADDRESSING DRIVERS OF CLIMATE-INDUCED MIGRATION
THROUGH STEP COMMUNITY AND MUNICIPALITY TOOLKITS

author's elaboration



4.2.4 STAKEHOLDER MAPPING.

Effectively addressing climate-induced internal migration in Uganda requires a coordinated, multi-level effort. The STEP Toolkit engages a wide array of stakeholders across both demand and supply sides (Table 4 and 5) This mapping reflects the roles and relevance of key actors in line with the categories outlined in Map 1 – Displacement: Roles and

TABLE 3:

STEP COMMUNITY TOOLKIT – KEY STAKEHOLDERS

(ALIGNED WITH "MIGRANTS AND DISPLACED," "WOMEN AND YOUTH," "LOCAL GOVERNMENTS," AND "CIVIL SOCIETY ORGANIZATIONS AND NGOS" IN MAP 1)

STAKEHOLDER	ROLE
At-Risk Communities and Local Leaders	Co-design and validation of training content to ensure local relevance, legitimacy, and trust
Community-Based Organizations (CBOs) and Civil Society Groups	Facilitate outreach, local delivery of training, and follow-up support to participants
Technical Experts and Curriculum Designers (e.g., migration, legal protection, gender, urban services)	Deliver second-tier skills programs tailored to pre-identified economic sectors in host municipalities
National Identification and Registration Authority (NIRA)	Support participants in restoring or securing legal identity and key documentation
UN Agencies and INGOs (e.g., UNHCR, IOM, NRC)	Provide technical support on protection, displacement preparedness, and safe migration pathways

TABLE 4:

STEP MUNICIPALITY TOOLKIT – KEY STAKEHOLDERSS

(ALIGNED WITH "LOCAL GOVERNMENTS," "NATIONAL INSTITUTIONS," AND "INTERNATIONAL DONORS" IN MAP 1)

STAKEHOLDER	ROLE
Municipal Governments (Gulu, Mbarara, Mbale, Arua, Fort Portal)	Implementation and coordination of planning, zoning, and service delivery
Ministry of Local Government & National Planning Authority	Alignment with national decentralization and development strategies
Ministry of Lands, Housing, and Urban Development	Technical input on land use, shelter planning, and infrastructure zoning
Ministry of Finance & Uganda Investment Authority	Mobilization of public funds and facilitation of sector-aligned FDI
International Development Partners (e.g., World Bank, UN-Habitat, UNHCR)	Technical and financial support for urban resilience and migration integration
Harvard Growth Lab / Technical Advisors	Guidance on sectoral opportunity mapping and industrial strategy using the Atlas of Economic Complexity

05

IMPLEMENTATION STRATEGY.

The toolkit will be delivered through a combination of community-based workshops and peer-led sessions, coordinated with civil society organizations, labor centers, returnee networks, and women's and youth associations.

5.1 IMPLEMENTATION STEPS

Step 1: Preparation

- To ensure the smooth administration of the program wherever it is applied, a preparatory phase is required, which will help shape the design of the toolkit appropriately and facilitate the organization of the STEP Community toolkit.
- First, a target region and population must be selected based on their vulnerability to extreme climate events and potential for migration.
- A suitable destination city or region will be selected based on the socio-economic profile of the target population, aiming to limit spatial and cultural distance. This typically involves selecting a regional capital over Kampala to alleviate pressure on the national capital and stimulate regional economies. The goal is to reduce labor market frictions and facilitate the integration of internal migrants with local authorities and businesses.
- For the first few implementations of the toolkit, private investors from strategic industries will be contacted to help fund the program, as detailed previously, and to assist in coordinating the intake of workers. In parallel, we will reach out to local officials to explain the project, provide them with data on climate events and subsequent migration flows, and request their support in administering the project.
- We will organize pilot group sessions as community consultations with local officials, NGO representatives, and community members. This participatory process will inform training design by incorporating local realities and experiences related to social services, legal frameworks, and logistical issues, such as health center registration and access to public housing. These sessions will also aid in recruiting qualified volunteers for registration and training. Ideally, we'll collaborate with municipalities to map population inflows, draft urban growth strategies, and plan employment-absorbing zones, such as public works and informal business clusters
- Another pilot group will also work on a survey design to help monitor the progress and evolution of the aid program's beneficiaries. It should collect information on employment status, living conditions, integration into social circles, and other relevant factors, while adhering to ethical considerations (General Data Protection Regulation). The goal is for it to be administered to the selected candidates for the first time during registration and then again on multiple occasions throughout the program.

Step 2: Pilot Phase - Year 1

Once the preparation phase has been conducted, the program will be officially launched with :

- The registration of eligible candidates to the program, based upon several selection criteria, such as their age (15-29 years old), their housing situation (flood prone area), and their willingness to participate in the first 5-day training part of the program, (Figure 6) as well as an agreement to register basic information in our monitoring survey. This step will be coordinated with civil society organizations, labor centers, returnee networks, and women's and youth associations.

- A first-tier 5-day training program, launched in three high-risk rural districts and one major receiving city (e.g., Mbale), targeting 2,000 people, on a rolling basis over three months. Core content covers migration rights, job readiness, budgeting, and accessing urban services. (see Intervention Axis II in Proposed Solution section)

- The identification and enrollment of individuals interested in further preparation for second-tier training programs (3–6 months), proposed to a randomized sample consisting of half the participants who completed the initial training. These programs are designed around likely relocation zones and emerging economic sectors, aiming to help them acquire the necessary skills in these partnered industries.

FIGURE 6:

TYPICAL ROTATIONAL THREE-WEEK
TRAINING AGENDA FOR STEP COMMUNITY TOOLKIT IN ONE DISTRICT

SUN	MON	TUE	WED	THU	FRI	SAT
	01/12	02/12	03/12	04/12	05/12	06/12
	Registration	Registration	Registration	Registration	Registration	
07/12	08/12	09/12	10/12	11/12	12/12	13/12
	Registration	Registration	Registration	Registration	Registration	
14/12	15/12	16/12	17/12	18/12	19/12	20/12
	Livelihoods & Economic Security	Livelihoods & Economic Security	Legal & Financial Preparedness	Urban Orientation & Access to Basic Services	Gender-Specific Protection & Inclusion	
21/12	22/12	23/12	24/12	25/12	26/12	27/12
	Livelihoods & Economic Security	Livelihoods & Economic Security	Legal & Financial Preparedness	Urban Orientation & Access to Basic Services	Gender-Specific Protection & Inclusion	
28/12	29/12	30/12	31/12	01/01	02/01	03/01
	Livelihoods & Economic Security	Livelihoods & Economic Security	Legal & Financial Preparedness	Urban Orientation & Access to Basic Services	Gender-Specific Protection & Inclusion	

author's elaboration

Step 3: Expansion of the program - Year 2

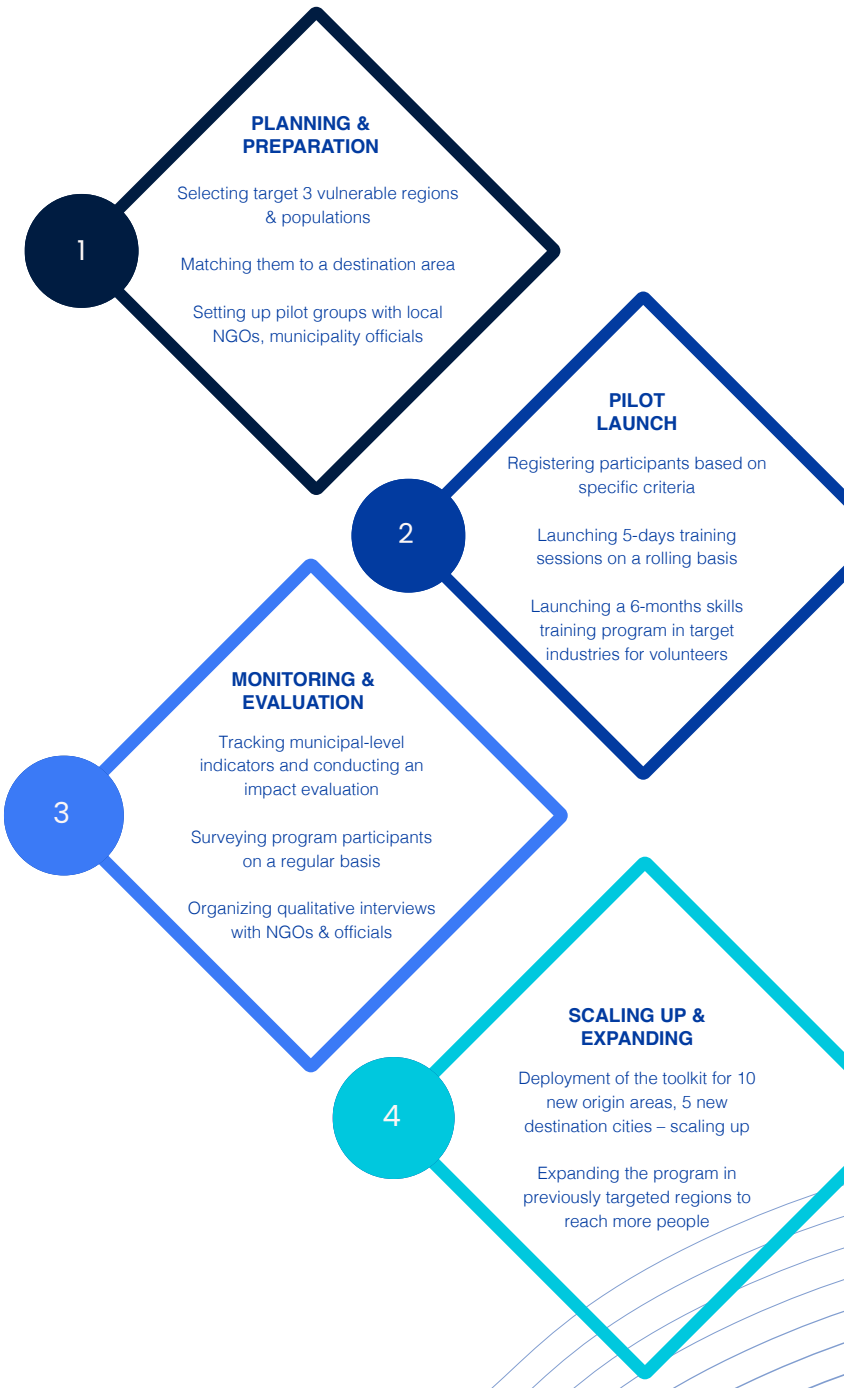
In the second year, we will assess the current progress of the pilot trial, thanks to continuous monitoring, to check whether the set objectives have been reached. We will also conduct an impact evaluation to assess the actual impacts and effectiveness of the program and provide further recommendations.

- The results will be summarized in a report, published, and communicated to local partners (municipality officials, firms) to promote good practices, such as transparency and accountability. The project manager will be able to adjust the project's trajectory based on the results and make necessary adjustments accordingly.
- If we receive satisfactory results, the next step will be to expand toolkits to 10–12 rural districts and five cities, adjusting for regional needs.
- Scaling up technical training in sectors identified as high potential by the Growth Lab (e.g., food processing, light construction, and manufacturing, as well as water services) and in previously targeted areas will deepen the impact of our initial intervention. It will be carried out to meet the remaining needs of the rural population.
- During this third step, we will provide ongoing technical support to new municipalities to ensure relocation trends are integrated into infrastructure investments, housing plans, and urban employment schemes.
- Monitoring & evaluation will continue to be conducted regularly

MAP 4:

IMPLEMENTATION TIMELINE

author's elaboration



5.2 RESOURCES NEEDED

The successful implementation of this project to support climate-affected populations through their relocation and resettlement process will also depend on our access to essential resources.

➔The project will require qualified staff in the form of a multidisciplinary team including:

- Project managers are responsible for overseeing progress, adjusting implementation plans as needed, managing the budget, and supervising field teams
- Field officers, who will coordinate local implementation, liaise with local authorities and civil society organizations, schedule training sessions, and monitor on-site conditions to ensure resources are in place
- Case workers, who will support participants through registration, need assessments, service access, and individual follow-up throughout the program. They will also help administer surveys to collect longitudinal data
- Skills trainers, who will deliver targeted, industry-specific training programs in line with the employment needs of destination cities (6-month duration)
- Monitoring and Evaluation (M&E) staff, responsible for designing indicators, tracking outcomes, and ensuring that data collected feeds into adaptive program management and impact assessment.

➔It will also rely on partnerships with local NGOs and private employers

➔The implementation of the project will necessitate physical infrastructure and supplies, such as:

- training centers for the 5-day program
- factories for the skills-for-transition program
- learning materials (documentation)
- staff equipment (laptops, SurveyCTO access, etc.) and office space

➔Finally, a dedicated budget will be necessary for:

- Staffing and administrative costs

training and capacity building for the staff and volunteers (curriculum, trainers, equipment, technology)

- Community engagement (consultations with peers, workshops, awareness, and overall communication)

FIGURE 7:

ESTIMATED IMPLEMENTATION BUDGET FOR STEP TOOLKIT PILOT IN PALLISA DISTRICT (1-YEAR PERIOD)

author's elaboration

Project	**STEP Toolkit Project**
Location	**Pallisa**
Period	**11/01/2025 - 10/31/2026**
Implementation Phases	**Preparation & Pilot Year**

I - STEP Municipality Costs

DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	UNIT COST	TOTAL COST	PRIVATE CONTRIBUTION*	MUNICIPALITY CONTRIBUTION	GENEVA CHALLENGE PROJECT BUDGET**	EXPLANATION
Staff Salaries										
Project Manager	1	Person	2	Months	$ 2,200	$ 4,200			$4,200	To oversee the project implementation
Field Officer	2	Person	2	Months	$1,600	$6,400			$6,400	To coordinate the local implementation, liaise with local authorities and civil society organizations in the preparation phase
Case Workers	3	Person	1	Week	$250	$750			$750	1 week training on tasks such as survey administration, registration
Staff Expenses										
Technology	6	Laptop			$500	$3,000			$3,000	
Software	1	SurveyCTO ad	2	Months	$630	$1,260			$1,260	Survey Administration Software
Furniture	6	Desks, chairs etc.			$1,200	$7,200		$7,200		
Operational Costs										
Pilot group session	6	Room	1	Day	$50	$300		$300		4 pilot group sessions tied to the training curriculum, 2 to survey design
Transportation Costs	3	Pallisa bus sul	2	months	$39	$234		$234		Bus subscription for the PM & Fos to travel to pilot group sessions, or meet with officials & local NGOs
Banking fee	1	bank	2	Months	$200	$400			$400	
Total STEP Municipality costs								**$7,734**	**$16,010**	

II - STEP Community Costs

DESCRIPTION	QUANTITY	UNIT	QUANTITY	UNIT	UNIT COST	TOTAL COST	PRIVATE CONTRIBUTION*	PARTNER CONTRIBUTION	GENEVA CHALLENGE PROJECT BUDGET**	EXPLANATIONS
Staff Salaries										
Project Manager	1	Person	10	Months	$ 2,200	$ 22,000			$ 22,000	To oversee the project implementation
Field Officer	2	Person	10	Months	$1,600	$32,000			$32,000	To coordinate the local implementation, liaise with local authorities and civil society organizations in the preparation phase
Case Worker	3	Person	10	Months	$1,000	$30,000			$30,000	To support participants through registration, needs assessments, service access, and individual follow-up throughout the program + conduct survey collection
Monitoring & Evaluation Offic	1	Person	10	Months	$1,800	$18,000			$18,000	To designing indicators, tracking outcomes, and ensuring that data collected feeds into adaptive program management and impact assessment
Skills Trainers	10	Person	6	Months	$1,400	$80,000	$80,000			To deliver targeted, industry-specific training programs in line with the employment needs of destination cities
Staff Expenses										
Technology	1	Laptop			$500	$500			$500	Added M&E furniture
Software	1	SurveyCTO ad	10	Months	$630	$6,300			$6,300	Survey Administration Software
Operational Costs										
Community Outreach	6	Room	1	Day	$50	$300		$300		4 pilot group sessions tied to the training curriculum, 2 to survey design
Transportation Costs	6	Pallisa bus sul	10	months	$39	$2,340		$2,340		Bus subscription for the staff to travel to training sessions, factories & visit local partners
Banking fee	1	bank	2	Months	$200	$400			$400	
Supplies										
Communication Flyers	5000	units			$1	$5,000			$5,000	Information on training sessions schedules, program contents
Training Documentation	2000	units	4	modules	$2	$16,000		$16,000		Module content information on the 5-days trainjng
Total STEP Communitt Costs							**$80,000**	**$18,640**	**$114,200**	
Total Implementation Costs							**$80,000**	**$26,374**	**$130,210**	

** By 'Private Contribution', we refer to the support provided by our private sector partner for Axis II of the program implementation (skills-for-training component).*

*** 'By Geneva Challenge Project Budget', we refer to the remaining external funding required for the full implementation of the project, expected from institutional or Geneva Challenge sources.*

This budget outlines the full implementation costs for one district (Pallisa), including 2,000 trainees under the STEP Community Toolkit and 6 public municipality staff under the STEP Municipality Toolkit[24] .

[24] *This budget outlines the full implementation costs for one district (Pallisa), including 2,000 trainees under the STEP Community Toolkit and 6 public municipality staff under the STEP Municipality Toolkit. It can serve as a reference for scaling to 10–12 districts, with figures adjustable based on the number of targeted trainees per district. The structure offers a replicable baseline for broader budgeting and expansion planning*

5.3 RISKS / MITIGATION

a. **Funding Constraints in a Competitive Landscape:** The project enters a competitive funding environment, particularly in Uganda, where numerous NGOs and development actors are already present. It may face challenges in securing sustained financial support from public officials, particularly during its initial implementation.

   Solution: Emphasize the project's innovation, pilot potential, and data-driven design to appeal to private investors interested in scalable, forward-looking interventions tied to their industry. Strong monitoring and evaluation (M&E) will help demonstrate early impact and support future funding.

b. **Limited Resources:** With a lean team and a constrained budget, the pilot will require utmost efficiency. The first-phase implementation is more likely to encounter delays due to unforeseen logistical, cultural, or administrative barriers at the local level.

   Solution: Emphasize flexible planning, real-time feedback loops, and robust coordination efforts across teams. Field officers will play an essential role in adapting to challenges and coordinating with local partners. Clear time management and contingency planning (with buffer periods and plan Bs) will ensure that core milestones are met without compromising the quality of the project.

c. **Difficulty Reaching and Engaging Participants:** Efficiently engaging at-risk populations could prove challenging due to limited mobility, distrust in the institutions or time constraints limiting participation incentives.

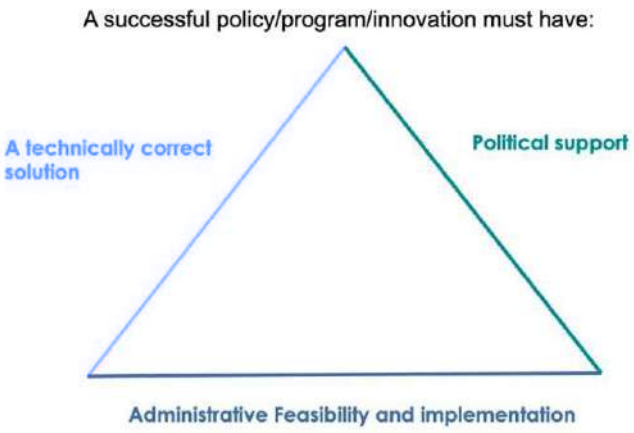
   Solution: Develop a targeted outreach in coordination with local actors (e.g., community leaders, civil society organizations). Communication will be culturally adapted to include informational and behavioral incentives, meaning individuals will be informed of the flood risks encountered in the area, the program benefits, and future employment perspectives. Local case workers will provide individual follow-ups with participants to sustain engagement.

5.4 FEASIBILITY

For this program to be successful, it must meet a few requirements, which can be summed up to these three aspects:

MAP 5:

THE STRATEGIC TRIANGLE – PUBLIC POLICY



Source : Imago Global Grassroots - Strategic Triangle

- **Political Support:** Uganda is considered a model for its migration policy environment, as it strives to adopt integrated approaches that are often more settlement-based than camp-based, compared to its neighboring countries. It is also one of the only countries to have launched a national implementation plan for the Global Compact for Migration (GCM), further signaling its commitment to coordinated, rights-based migration governance, in collaboration with many local initiatives. This positions Uganda as a perfect potential partner, given that the funding and administrative capacity are established

- **Technically Correct Solution:** Our toolkit addresses the long-term challenge of climate migration by offering a practical mitigation strategy. Grounded in economic theory and project management, the solution supports both incoming migrant populations and regional development through an integrated model. It connects high-potential sectors with a trained labor supply and is backed by robust monitoring and evidence-based management: its structured impact evaluation is central in assessing robust results and informing future adaptation.

5.5 HOW IT WORKS IN PRACTICE: ZOOMING INTO PALLISA, THE PILOT DISTRICT

Pallisa is a rural district in the Bukedi region of eastern Uganda, where over 90% of the population relies on subsistence farming. Increased flooding and erratic rainfall have put pressure on agricultural livelihoods, leading to climate-induced out-migration. The Bukedi region, including Pallisa and neighboring districts such as Budaka and Tororo, is among the most affected areas in Uganda, with a projected 10% to 20% increase in internal migration by 2050 if no adaptive strategies are implemented[25].

Young people aged 15 to 29 in Pallisa are particularly likely to migrate due to limited job opportunities and inadequate climate-resilient infrastructure. Women and girls who remain face growing challenges, including restricted access to education, healthcare, and financial services. Local institutions struggle with insufficient resources and low technical capacity, making it hard to develop effective climate adaptation strategies.

Pallisa is chosen as the target area for this proposal because it highlights rural vulnerability and increasing out-migration, primarily affecting women and young people. The project aims to create a targeted, small-scale intervention to address these challenges. We will consider the broader context of Sub-Saharan Africa and focus on this community, which has the potential to serve as a model for future scalability.

On the other hand, Mbale has been selected as its matching destination region, being a fast-growing secondary city, to minimize spatial and cultural distance. Mbale's fruit processing and sauce manufacturing industries have been identified via the Atlas of Economic Complexity as having strong growth potential. These sectors offer promising employment opportunities and stand to benefit from an influx of skilled workers trained through our program.

The first axis of the project will intervene during the preparation phase. Field operators will engage local actors such as community-based organizations (CBOs), youth and women's associations, and civil society groups—like the Uganda Youth Development Link (UYDEL), Youth Initiative for Development in Africa (YIDA), and CEFORD—alongside international partners such as UNHCR, NRC, and IOM. These groups will co-lead pilot sessions in Pallisa, supported by technical experts from institutions such as Uganda Technical College, Mbale. Together, they will co-design survey tools (Annex 2), training curricula, and communication materials that reflect local realities - flood risk, reliance on agriculture, and key socio-demographic factors (age, gender, and mobility status). This participatory process ensures contextual relevance and builds trust from the outset.

In Step 2 (Pilot Phase), registration of eligible youth (aged 15-29) vulnerable to climate shocks will be coordinated with local networks and case workers to verify residency in Pallisa. At registration, case workers will administer an initial survey. Over the next few months, 2,000 participants will be invited to a 5-day training on migration rights, job readiness, and urban services in Mbale. Half of those completing the training will be randomly selected for further technical training in industries like fruit processing and sauce manufacturing, in partnership with local factories and vocational training providers. The project manager will collaborate with the Mbale municipality to identify an area for a new sauce manufacturing factory, aiming to hire and train about 700 participants over 9 months. Continuous program monitoring will take place, with midterm reports released at six months and one year to highlight insights and challenges. An impact evaluation will be conducted at the end of Year 1 and every six months thereafter to assess outcomes and adapt the program.

In Step 3 (Expansion Phase), building on the lessons and outcomes from the Pallisa-Mbale pilot, the project plans to expand to 10–12 rural districts (such as Budaka, Tororo, or Nakapiripirit districts in the same region, or the Kasese district in Western Uganda, also affected by floods) and 5 secondary cities (such as Fort Portal for Kasese migrants) in Uganda by Year 2, scaling the number of beneficiaries from 2,000 to approximately 6,000. The origin-destination matching model will be adapted and replicated in other regions affected by various climate-related events, and it may later be extended to other countries facing similar migration and labor market challenges.

25 *(Rigaud, K, 2021 & Bagonza, J, 2023)*

06

MONITORING & EVALUATION

To assess the toolkit's success, a monitoring and evaluation (M&E) plan will be developed in advance and integrated throughout the implementation process. Monitoring will track progress, flag issues early, and provide operational insights, while evaluation will rely on baseline data and robust quantitative methods to measure impact and guide improvements. Success will be defined as the integration of target populations (e.g., young workers from Pallisa) into the local labor market and social fabric. Led by the M&E Officer and project team, activities will utilize multiple data sources and include quarterly reports that document progress, challenges, and recommendations.

6.1 SURVEILLANCE OF MACRO INDICATORS

To obtain an objective assessment of the program's success, we will monitor the evolution of employment rates over time for migrant populations in the secondary cities targeted by the toolkit, in comparison to other cities. This will require municipality-level data on migration flows, employment rates, health conditions, as well as information on urban planning evolutions and service coverage expansion within the city, which will be crucial for a robust quantitative analysis to be carried out later. Existing data sources that could be used include DHS data and the UBOS Labour Force Surveys (LFS), which are currently being launched and will provide precise district/municipal level data, as well as national data (Office of the Prime Minister, Ministry of Gender).

6.2 COLLECTING DATA THROUGH REGULAR SURVEY SESSIONS

To have more precise longitudinal data, the beneficiaries of the program will be surveyed using Survey CTO as a cohort at multiples points in time through the course of the program, before and afterwards (every 6 months), on aspects related to their access to the job market, their participation to other aid programs, their integration to social circles (activities, cooperatives or engagement in community saving groups for example), their health condition, skill levels and qualifications, recovery of lost documentation such as ID/birth certificates, and overall well-being). Please kindly consult Annex 2 for example of some of the sections that are expected to be included in the survey.

6.3 CONDUCTING INTERVIEWS

Conducting qualitative interviews will be a substantial part of the project monitoring, as it will enable us to understand precisely what difficulties the target groups have experienced despite the program's assistance, identify their most pressing remaining needs, and adjust the program accordingly.

Interviews with municipality officials, other migration-related NGOs, and training center workers will be crucial in obtaining an external opinion on the program's broader impact and its efficiency compared to similar projects, as well as providing operational insights to the management team.

These various sources of information will provide an objective overview of the toolkit's implementation, serving as the basis for quarterly assessments. These assessments will be published in reports to summarize the progress made, identify any problems encountered, and offer guidance on new pathways for further implementation.

6.4 IMPACT EVALUATION

An impact evaluation will be conducted at the end of the first pilot year and at each significant milestone to assess the project's effectiveness. Using municipal-level data, we will perform quantitative analyses through a

Difference-in-Differences (DiD) approach, comparing employment outcomes in cities with the project (treated cities) against similar cities without it (control cities), both before and after the intervention. If data from project implementation is insufficient, we will use longitudinal data from participants to compare outcomes between those who received the training-for-transition program and those who did not. This evaluation will identify which participant profiles benefit most and areas for improvement. Additionally, we will conduct recipient/non-recipient comparisons within the same origin and destination cities to gain a deeper understanding of the program's impact.

6.5 RISK MANAGEMENT

The Monitoring & Evaluation system, while rigorous and adaptive, faces risks to data quality, including participant dropouts, data access delays, and technical issues such as poor internet connectivity or device failure. To mitigate these risks, we will use backup paper forms, conduct refresher training for field staff, and perform regular data audits. To reduce attrition in follow-up surveys, we will establish recontact protocols and potentially offer small non-financial incentives, such as transportation vouchers, to encourage participation. Utilizing diverse data sources—administrative, survey-based, and qualitative—will help triangulate findings and ensure analytical robustness despite potential data loss.

07

SCALABILITY & REPLICABILITY

7.1 REGIONAL REPLICABILITY AND STRATEGIC POSITIONING.

The STEP Toolkit is a flexible solution for addressing climate-induced migration in Sub-Saharan Africa (SSA). Utilizing existing tools, such as national climate risk analyses and the Harvard Growth Lab's Atlas of Economic Complexity, allows for easy transferability across countries. By leveraging established datasets, the toolkit minimizes upfront costs and enables quick deployment.

- With the Atlas providing product complexity and proximity data, replicating the STEP Municipality Toolkit involves aligning local economic potential with expected inflows of climate-displaced populations. High-resolution displacement risk maps from Groundswell Africa, combined with national climate strategies, help identify priority intervention areas and vulnerable communities.

- This data-driven approach and institutional flexibility make STEP an ideal fit for phased regional expansion, starting in politically stable nations such as Kenya, Tanzania, and Rwanda, and later moving to more fragile regions through coordinated planning.

7.2 ENABLERS FOR SCALING.

Several features embedded in the STEP Toolkit make it especially conducive to scaling across Sub-Saharan Africa

- **Modular Design with Built-In Flexibility:** Both the STEP Municipality and STEP Community Toolkits are intentionally designed to be modular and adaptable. This allows each component—from sector targeting to workshop curricula—to be adjusted to country-specific realities, urban typologies, and institutional capacities. Whether a country seeks to grow digital services, agro-processing, or tourism, the STEP model can be rapidly aligned with local priorities.

- **High Political and Donor Attractiveness:** STEP aligns with donor priorities—particularly among European actors—who seek sustainable alternatives to irregular international migration. By promoting safe and productive internal migration from rural to urban areas, STEP offers a complete, development-oriented package that is politically appealing and expected to attract funding interest.

- **Alignment with Regional Economic Development Agendas:** STEP enhances national growth strategies rather than competing with them. By connecting vulnerable populations to strategic sectors, it promotes labor absorption and skills development in line with local industrial policies—an approach likely to gain traction with both local and regional governments.

7.3 CONDITIONS FOR SUCCESSFUL SCALING.

While the model has strong built-in enablers, a few conditions will help ensure successful replication and adaptation across countries:

- **Data Availability and Policy Alignment:** Successful adaptation depends on the availability of regional climate displacement projections and baseline economic data. While some tools exist, governments must be willing to localize and apply these projections and align them with development, migration, and urban planning policies.

- **Local Buy-In and Institutional Coordination:** Municipal governments must recognize the value of proactively managing migration. This requires buy-in from local officials and alignment with national-level institutions, including ministries of finance, labor, planning, and urban development.

- **Implementation Capacity at the Local Level:** While the model is adaptable, its success relies on coordination across various sectors, including urban planning, housing, employment, and basic services. Investment in local technical capacity, including training and inter-agency collaboration, is crucial to sustaining long-term success.

- **Regional Coordination in Conflict-Affected Settings:** In fragile states like Sudan or South Sudan, where internal relocation is limited, STEP could support a regional mobility model. Vulnerable communities could be prepared for relocation, not within their country, but toward nearby cities in more stable countries where economic growth opportunities developed through the STEP Municipal model would require a larger labor force. This requires cross-border cooperation and migration-sensitive planning at the regional level—but could unlock transformative potential across multiple labor markets.

7.4 FIT WITH INTERNATIONAL FRAMEWORKS.

The STEP model aligns closely with several existing global frameworks and policy agendas:

- The Kampala Convention (African Union) on the Protection and Assistance of Internally Displaced Persons encourages member states to adopt anticipatory, rights-based approaches to internal displacement. STEP operationalizes this mandate through community-based preparedness and municipal planning.

- The Global Compact for Migration emphasizes the enhancement of safe, orderly, and regular migration within and across borders. STEP contributes directly to its internal dimension by offering tools for planned and supported movement.

- The Sendai Framework for Disaster Risk Reduction and the Paris Agreement's adaptation priorities both emphasize the importance of early action and risk-informed planning. STEP's anticipatory design and its integration into urban systems meet these calls in practical terms.

By embedding itself within these frameworks, the model reinforces—not replaces—existing national and international policy tools, thereby reducing the friction of integration and increasing the likelihood of political uptake, additionally aim to impact different SDGs (please see Annex 3).

7.5 A PATHWAY TO SCALABLE IMPACT

The STEP Toolkit offers a scalable blueprint for climate-resilient, dignity-based internal migration. Its two-pronged approach—supporting both communities and municipalities—ensures balanced and inclusive planning that prevents the creation of new urban vulnerabilities while enabling vulnerable rural populations to make informed, empowered choices.

Crucially, STEP does not seek to prevent movement, but rather to structure it in a way that contributes to both individual resilience and territorial economic development. This makes it not only scalable but also strategically aligned with regional economic transformation goals. As countries across SSA grapple with the dual pressures of climate risk and urbanization, STEP provides a coherent and field-ready approach that can be progressively expanded—one municipality and one community at a time, starting with Pallisa.

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CONCLUSION

Uganda stands at a pivotal crossroads, where the convergence of climate change and internal mobility demands a bold reimagining of policy, planning, and protection. Climate-induced migration is no longer an exception, it is becoming a defining feature of life for millions of Ugandans. Yet, most existing responses remain reactive, fragmented, or limited to short-term humanitarian aid. The current system fails to anticipate movement, to protect the agency of those forced to move, and to support the communities that receive them. If left unaddressed, this gap risks amplifying social tensions, deepening poverty in urban peripheries, and undermining Uganda's long-term development trajectory.

This proposal offers an alternative path, one that views mobility not as a failure of adaptation but as a legitimate strategy for resilience. It adopts a whole-of-society approach that equips both ends of the migration pathway. The STEP Community Toolkit empowers vulnerable populations to prepare for displacement. At the same time, the STEP Municipality Toolkit helps receiving towns and cities strengthen their capacity to plan, absorb, and benefit from new residents. Together, these tools move beyond emergency response and toward structural transformation.

By diagnosing the root causes of climate-induced migration, including agricultural collapse and gender-based vulnerability, as well as weak urban governance and fragmented data systems, the project lays the foundation for targeted, scalable solutions. The proposed model is not a blueprint for one location, but a flexible framework that can be tailored to regional realities and replicated across Sub-Saharan Africa, where most climate migration is expected to occur in the coming decades. It does not replace government systems but complements them, offering a bridge between local needs, national priorities, and international commitments on climate and migration.

More than a technical solution, STEP is a political proposition: that the future of climate resilience lies in inclusion, anticipation, and local empowerment. By recognizing migration as a tool—not a threat—this project offers a pathway toward regional economic development, inclusive growth, and decentralization, providing both dignity to migrants and opportunities to host municipalities and communities. Uganda can lead the way.

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REFERENCES

- Bagonza, J. (2023). Community-Based Adaptation and Advocacy Approaches in Gogonyo Sub-County, Pallisa District, Uganda. WeADAPT & CARE International. https://weadapt.org/wp-content/uploads/2023/05/CBAA_Uganda.pdf
- Banura, R. (2023). Challenges of implementing sustainable tourism development strategies in Uganda: A case study of Fort Portal Tourism City (Master's thesis). Mid Sweden University.
- Broeckx, J., Maertens, M., Isabirye, M., Vanmaercke, M., Namazzi, B., Deckers, J., Tamale, J., Jacobs, L., Thiery, W., Kervyn, M., Vranken, L., & Poesen, J. (2018). Landslide susceptibility and mobilization rates in the Mount Elgon region, Uganda. Geomorphology, 308, 1–15.
- Clement, V., Rigaud, K. K., de Sherbinin, A., Jones, B., Adamo, S., Schewe, J., ... & Shabahat, E. (2021). Groundswell Part 2: Acting on internal climate migration. World Bank. https://openknowledge.worldbank.org/handle/10986/3624
- FAO & UN Women. (2020). The role of gender in sustainable rural development: Policy brief. Food and Agriculture Organization of the United Nations. https://www.fao.org/3/cb1331en/cb1331en.pdf
- FAO & ODI. (2021). Gendered impacts of climate change and women's resilience: Evidence from sub-Saharan Africa. Food and Agriculture Organization of the United Nations & Overseas Development Institute. https://odi.org/en/publications/gendered-impacts-of-climate-change/
- Harvard Growth Lab. (n.d.). The Atlas of Economic Complexity. Center for International Development at Harvard University. https://atlas.hks.harvard.edu/
- International Organization for Migration. (2022). Assessing the evidence: Migration, environment and climate change nexus in Uganda. https://environmentalmigration.iom.int/resources/assessing-evidence-migration-environment-and-climate-change-nexus-uganda
- Rigaud, K. K., de Sherbinin, A., Jones, B., Adamo, S., Maleki, D., Arora, A., ... & Mills, B. (2021). Groundswell Africa: Internal climate migration in West African countries. World Bank. https://openknowledge.worldbank.org/handle/10986/36247
- Rigaud, K. K., de Sherbinin, A., Jones, B., Adamo, S., Maleki, D., Casals Fernández, A., & Shi, H. (2021a). Groundswell Africa: A Deep Dive Into Internal Climate Migration in Uganda. Washington, DC: World Bank.
- https://documents1.worldbank.org/curated/en/101161634533716676/pdf/Groundswell-Africa-A-Deep-Dive-Into-Internal-Climate-Migration-in-Uganda.pdff"
- Turner, C. (2025, January 14). How to write an implementation plan: A step-by-step guide for project success. Thornton & Lowe. https://thorntonandlowe.com/how-to-write-an-implementation-plan/
- UN-Habitat. (2019). Integrated and multi-scalar planning in West Nile region, Uganda: Koboko–Arua–Nebbi. United Nations Human Settlements Programme.
- United Nations Statistics Division. (2023). Global SDG Indicators Database. Department of Economic and Social Affairs. https://unstats.un.org/sdgs/indicators/database/
- World Bank & UNHCR. (2016). An assessment of Uganda's progressive approach to refugee management: Achievements, challenges and opportunities for improvement. World Bank Group.
- World Bank. (2023). World development report 2023: Migrants, refugees, and societies. https://www.worldbank.org/en/publication/wdr2023
- World Bank. (2021a). Groundswell Africa: Internal climate migration in the Lake Victoria Basin countries (Vol. 3 of 3): The results. http://documents.worldbank.org/curated/en/605491635278102553
- World Bank. (2021b). Uganda economic update: From crisis to green resilient growth – Investing in sustainable land management and climate-smart agriculture (17th ed.). World Bank Group.

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ANNEXES

ANNEX 1.

DETAILED SUMMARY TABLE OF THE EXISTING POLICIES AND INITIATIVES REGIONAL REPLICABILITY AND STRATEGIC POSITIONING.

Theme	Initiative	Actor	Type of Organization	Duration	Place	Topic	Initiatives	Key Results	Challenges & Obstacles
Migrant Hosting	REHOPE (Refugee and Host Population Empowerment)	UNHCR & Government of Uganda	Multi-agency strategy	Since 2015	Refugee-hosting districts	Refugee hosting & empowerment	Improving services and infrastructure for refugees and hosts	Enhanced service delivery, humanitarian-development nexus built	Limited to international displacement, adaptation needed for internal/climate mobility
	DRDIP (Development Response to Displacement Impacts Project)	World Bank & Office of Prime Minister	Government & international funder	Ongoing	Refugee-hosting districts	Infrastructure & economic development	Investment in infrastructure and economic development in host districts	Improved infrastructure & economic opportunities in host communities	Sectoral focus; sustainability & long-term impact unclear
	Cities Alliance & UN-Habitat urban development	Cities Alliance & UN-Habitat	International organizations & local governments	Ongoing	Secondary cities (Arua, Gulu)	Urban planning & displacement	Municipal Development Forums integrating displacement into urban planning	Improved local planning and inclusion of displaced populations	Limited scale; integration into broader national frameworks needed
	AFFCAD and SEEFAR Urban Programs	AFFCAD, SEEFAR	Youth-led NGOs	Ongoing	Kampala (Bwaise, Kisenyi)	Urban Refugee Support	Skills, therapy, micromigrants, peer training	Community resilience	Limited funding, narrow reach
	URHOPE (Uganda Refugee and Host Population Empowerment) Framework	Government ministries & humanitarian actors	Multi-sectoral coordination	Recent	National	Coordination & policy	Enhances coordination among ministries and actors	Strengthened multi-sectoral cooperation	Emerging framework; integration with climate migration unclear
Migrant Integration	ACTED Urban Governance Pilots	ACTED	NGO & local governments	Recent pilots	Moroto, Kotido	Social & economic integration	Strengthening municipal planning focusing on youth, informal workers	Improved urban governance & inclusion efforts	Fragmented, donor-dependent; lacks sustainable mechanisms
	COMPASS	LWF, CDSS (South Sudan)	NGO + Cross border NGO	2022-2024	South Sudan - Uganda border	Reintegration & Peacebuilding	Livelihoods, training, migration agreements	Peacebuilding, reintegration	Cross-border coordination
	UN-Habitat Participatory Planning Tools	UN-Habitat	International organization	Ongoing	Secondary cities	Migrant inclusion in urban policy	Participatory urban planning to support migrant inclusion	Increased inclusion awareness	Nascent integration; scaling challenges
	Uganda Urban Refugee Integration Framework	UNHCR & partners	International & government collaboration	Developing	Urban areas	Policy mainstreaming	Framework to mainstream refugee/migrant inclusion	Framework in place; limited operationalization	Early stage; limited impact yet

Climate Migration Framing	Climate-Migration Nexus Assessment	IOM	International organization	2022	National	Climate mobility analysis	Analysis of climate shocks driving migration; institutional gaps identified	Raised awareness of climate mobility & gaps	No anticipatory planning; limited policy action
	Uganda National Adaptation Plans (NAPs)	Government (Ministry of Water & Environment)	Government policy framework	Ongoing	National	Climate adaptation & migration	Mentions migration but lacks operational focus	Policy recognition	Migration not operationalized; GCF readiness lacks mobility inclusion
	Mercy Corps & NRC community resilience projects	Mercy Corps, NRC	NGOs & local communities	Ongoing pilots	Vulnerable communities	Livelihood diversification & disaster preparedness	Community-based resilience and disaster preparedness projects	Enhanced local resilience	Indirect focus on migration; migration not central to strategy
Labor Market Integration	Green Jobs Programme	ILO & Ministry of Gender, Labour & Social Development	International & government partnership	Ongoing	Urban & peri-urban areas	Vocational training & sustainable livelihoods	Vocational training and green job promotion	Skills development, job creation	Limited focus on migration pathways
	Skills Development Fund	World Bank & government	International fund & government	Ongoing	National	TVET improvement	Improving TVET quality and access	Improved technical skills training	Migration-sensitive approaches limited
	Youth Livelihoods Programme (YLP) & Youth Employment Enhancement Project (YEEP)	Government	Government social programs	Ongoing	Rural areas	Youth employment & livelihoods	Support for vulnerable rural youth	Youth employment improved	Rarely linked to migration or displacement pathways
	Horizont3000 - Migration I & II	Horizont3000, AFARD, Palm Corps	NGO + local NGOs	Ongoing	West Nile	Livelihoods, Climate Resilience	Climate-resilient farming, mixed cooperatives	Social cohesion observed, food security increase	Land access, market links
	Makerere University Economic Policy Research Centre (EPRC) research	Makerere University	Academic research institution	Recent studies	National	Labor market & migration link	Research linking labor policies with internal migration	Identified opportunities for integration	Research not yet fully translated into programs
Toolkits and Methodologies	UN-Habitat Urban Profiling Toolkit	UN-Habitat	International organization	Applied ongoing	Arua, Koboko	Urban planning & service delivery	Assess service gaps to inform urban development	Improved urban planning data	Sectoral silos; scaling and integration challenges
	Integrated Urban Development Plans (IUDP)	Cities Alliance & national ministries	International & government partnership	Ongoing	Growing municipalities	Infrastructure & service coordination	Coordinated infrastructure and service delivery	Enhanced municipal coordination	Integration with national systems limited
	Kampala Capital City Authority (KCCA) GIS & digital platforms	KCCA	Local government	Pilot phase	Kampala	Urban management	GIS and digital tools for city management	Innovative urban data management	Scalability and national integration remain issues
	Resilience frameworks by ACTED & Mercy Corps	ACTED & Mercy Corps	NGOs	Ongoing	Vulnerable communities	Resilience & adaptive capacity	Early warning systems combined with participatory planning	Enhanced community adaptive capacity	Lack of comprehensive toolkit linking climate migration & labor markets
Comparative International Cases	Kalobeyei Integrated Settlement	UNHCR & Kenyan Government	International & government collaboration	Ongoing	Kenya	Refugee hosting & economic development	Refugee hosting integrated with local economic development	Spatial planning and market access improved refugee livelihoods	Context-specific challenges for adaptation
	Bouaké Urban Resilience Strategy	Côte d'Ivoire Government & partners	Government-led participatory governance	Ongoing	Côte d'Ivoire	Disaster risk reduction & climate adaptation	Disaster risk and climate adaptation integrated with governance	Enhanced urban resilience and governance	Scaling participatory approaches
	Comprehensive Refugee Response Framework (CRRF)	Ethiopian Government & partners	Government-led national integration framework	Ongoing	Ethiopia	Displacement integration	Integrates displaced populations into national systems	Improved regional equity and integration	Implementation gaps remain

	Rwanda decentralization and migration mainstreaming	Rwandan Governme nt	Government-led decentralization and planning	Ongoing	Rwanda	Local planning & rural-urban transitions	Mainstreaming migration in local planning	Stronger rural-urban planning	Challenges in scaling inclusive governance
	Bangladesh climate displacement approach	Governme nt & NGOs	Government and community adaptation	Ongoing	Bangladesh	Planned relocation & communit y adaptation	Planned relocation and community-based adaptation	Model of anticipatory climate governance	Complex social and logistical challenges

ANNEX 2.

ILLUSTRATIVE EXAMPLE: THE STEP SURVEY - A LONGITUDINAL IMPACT ASESSMENT TOOL

Section B : Housing and Wellbeing (sample questions)

1. What is your current housing situation?
□ Own home □ Rent □ Live with relatives □ Temporary shelter □ Other (please specify) : _____

2. Has your home been affected by flooding or landslides in the past year?
□ Yes □ No

3. How safe do you feel in your current community?
Very unsafe □ Rather unsafe 2 □ Rather safe □ Very safe □

Section E : Employment and Skills (sample questions)

1. What is your current employment status?
□ Unemployed □ Informal work □ Farming □ Formal employment □ Student

2. If employed, what kind of work do you do? _____

3. Have you received any vocational or skills training in the past year ?
□ Yes □ No

4. If yes, in what area?
□ Agriculture □ Construction □ Food processing □ Other (specify): _____

ANNEX 3.

CONTRIBUTION TO SDGS

Source (United Nation The 17 goals / Sustainable Development), author's elaboration.

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