BURUNDI Collective Intelligence PROJECT

FACT SHEET

INTRODUCTION

Since June 2022, the International Organisation for Migration (IOM) Displacement Tracking Matrix (DTM) and the Joint IDP Profiling Service (JIPS) have been planning implementing and monitoring the ECHO-funded project: *Environmental degradation and displacement: leveraging citizen-centred data to improve humanitarian programming.*

According to the Internal Displacement Monitoring Centre (IDMC), 2021 saw 38 million new displacements, of which 23.7 million – almost two thirds – were due to natural hazards. In response, IOM and JIPS will jointly lead a Collective Intelligence (CI) initiative targeting HIP priority areas on Disaster Displacement and Anticipatory Action for displacement events related to environment and climate related disasters in the East and Horn of Africa. The findings from this study can be used to feed early warning systems already in place in Burundi.

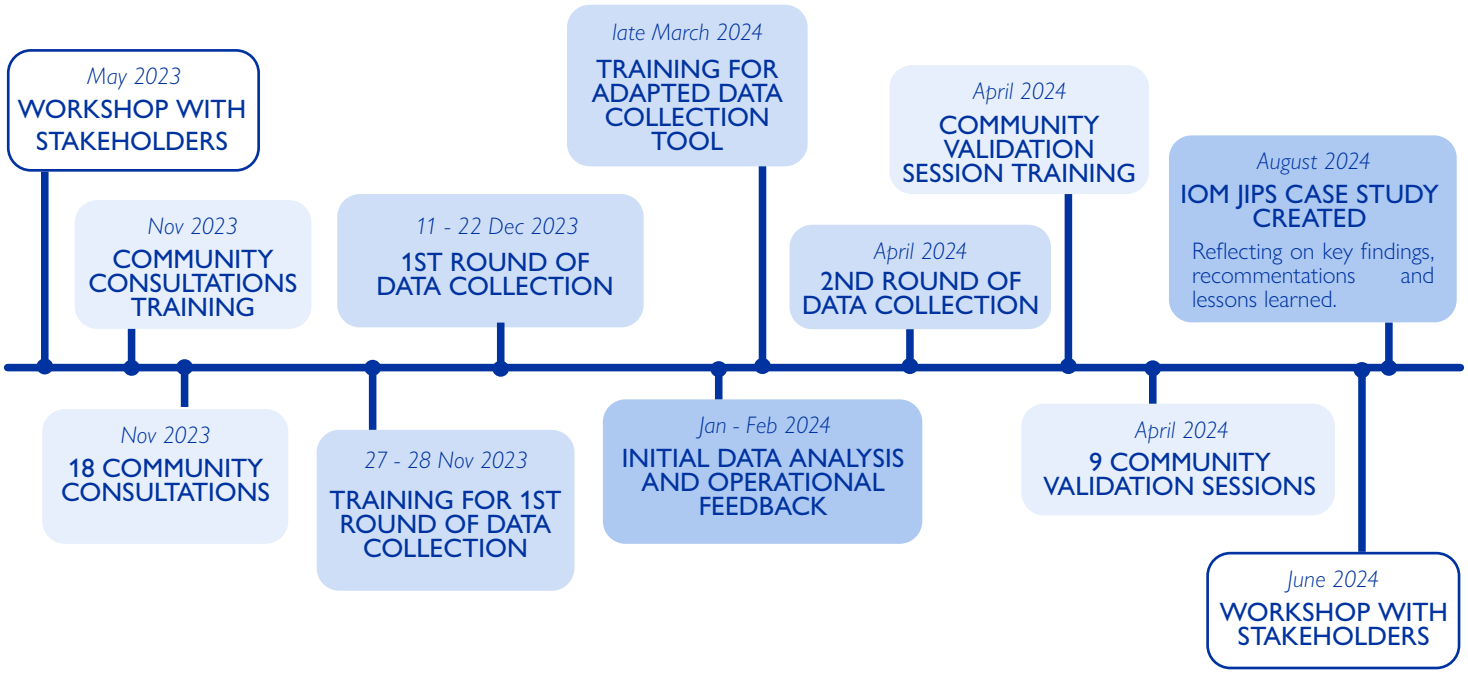
CI has the potential to improve data accuracy and representativeness through greater inclusion and enhanced local and community participation. As a result, the case study produced through this project will contribute to understanding community perceptions of hazard impacts, influencing factors and preventative measures implemented in at the colline-level.

Data collection is normally conducted using traditional enumerators conducting surveys of individuals regarding their household or key informants regarding their community. These approaches, while effective, have limitations including representative participation from the communities subject to data collection and the type of

data collected. Collective Intelligence data collection approaches can both supplement and enhance traditional data collection methods. By implementing bottom-up approach that empowers local communities to collect data with smartphones through an accessible data collection interface designed for this purpose. The Collective Intelligence methods allow for an understanding of how views differs among different population groups and within the colline.

PROJECT TIMELINE

The project commenced with a collaborative workshop in Burundi, where the International Organization for Migration (IOM), the Joint IDP Profiling Service (JIPS), and other key stakeholders developed and implemented a pilot Collective Intelligence approach. This approach integrated methods such as citizen science and participatory mapping to provide relevant data for Burundi's disaster risk landscape. It emphasized the importance of community insights in shaping subsequent data collection and analysis, promoting a participatory, community-driven risk assessment model. The innovative framework comprises three distinct tiers: qualitative insights through Community Consultations, quantitative analysis using KoboCollect for citizen science and participatory mapping excersises, and the qualitative validation of results through community sessions.



COLLECTIVE INTELLIGENCE APPROACH

TIER 1: QUALITATIVE INSIGHTS THROUGH COMMUNITY CONSULTATIONS

This tier focused on gathering deep insights into challenges related to natural hazards by facilitating dialogues with affected communities. Through these consultations, communities shared their experiences, the impacts of recurring disasters, and their coping strategies. These insights helped refine the quantitative data collection tools, ensuring a comprehensive understanding of the on-ground situation.

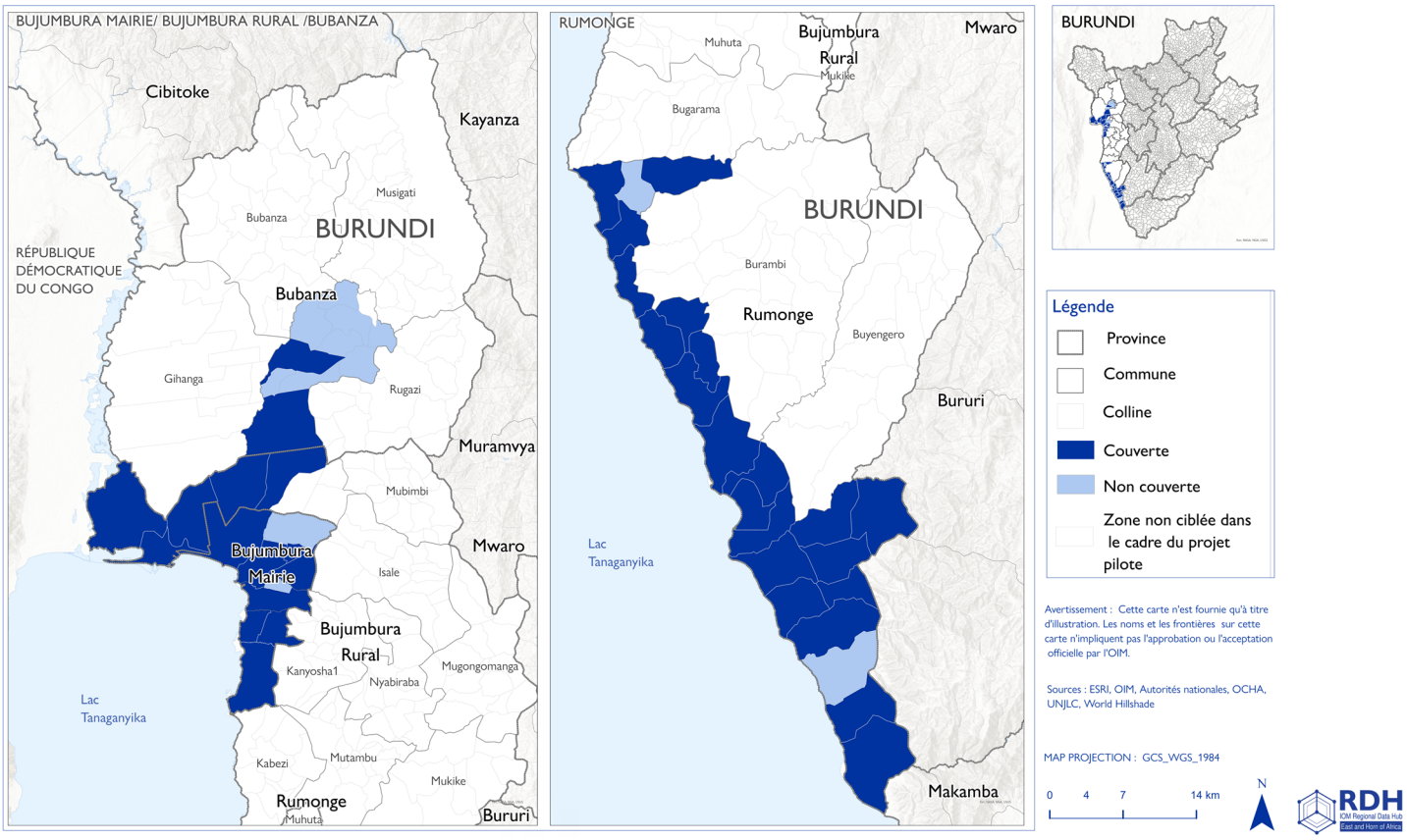
TIER 2: QUANTITATIVE ANALYSIS USING KOBO AND PARTICIPATORY MAPPING TO IDENTIFY MOST AFFECTED AREAS

Utilizing the Kobo platform, trends and patterns were identified across targeted Communes and Collines. This quantitative data was cross-referenced with qualitative findings, allowing communities to validate or challenge the conclusions drawn. The collaborative process fostered open-ended qualitative insights. Spatial analysis was employed to pinpoint the most affected Communes and Collines, informing the prioritization of interventions and resources in areas disproportionately impacted by natural hazards. The analysis evaluated hazard types and the extent of their impact on specific areas.

TIER 3: QUALITATIVE VALIDATION THROUGH COMMUNITY SESSIONS

This tier aimed at validating the accuracy of the collected data and providing contextual depth. Community input was crucial in prioritizing the most critical natural hazards and in evaluating and enhancing the Collective Intelligence approach. This continuous feedback loop fostered learning and scalability, ensuring the approach remained effective and adaptable.

MAP OF PROJECT DATA COLLECTION COVERAGE



COLLINE SELECTION

To select areas for initial rollout of the Collective Intelligence pilot, DTM cross-tabulated data from ETT exercises and the Multi-Hazard Risk Assessment in Burundi (2021), in particular in terms of number of incidents and estimated monetary damage per square meter. In order to test the method in the greatest diversity of contexts and for different types of hazards and damages (i.e. homes, infrastructure, fields), an effort was made to include areas inclusive of this diversity as well as urban, rural, and peri-urban settlements.

DATA COLLECTION METHODLOGY

During data collection, volunteers were instructed to conduct at least three individual interviews per day (for a minimum of 30 individual interviews) during the first round. As patterns and consensus formed from the individual interviews in regards to specific incidences of damage by natural hazards or areas where prevention or mitigation measures might be relevant, volunteers were instructed to map these impacts or solutions. For hazard impacts, enumerators were instructed to prioritize incidents with the greatest recent impact, which was generally in the past year.

KOBOTOOLBOX DESIGN

COMMUNITY PERSPECTIVES

Community perspectives were solicited through a mix of household and individual surveys covering both the respondents' views on the situation in the colline and their household's situation.

PARTICIPATORY MAPPING

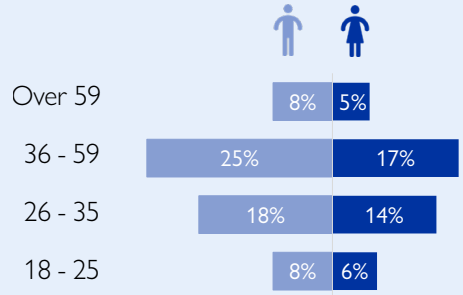
The mapping excersise provides an understanding of the concrete impacts of hazards on the community, including flooded homes, landslides, and other weather events. Additionally, this sections covers proposed or implemented prevention and mitigation measures.

Photo from data collection training showing participants using KOBOCOLLECT on phone, 27 November 2023

DATA COLLECTION SCOPE

Data collection was carried out in December 2023 and April 2024 in 4 Provinces, 6 Communes, and 65 Collines, in which 3,373 respondents (56% female, 44% male) were interviewed.

Sex and age of respondents



3,373 Respondents

2,520 Damage localised

2,311 Solutions localised

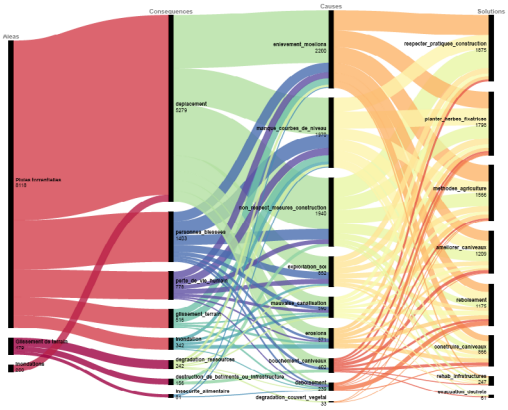
Vulnerabilities of Respondents

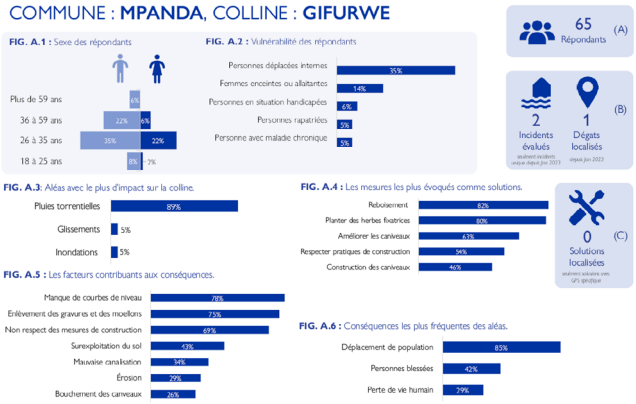
- 11% IDPs
- 10% Pregnant or breast-feeding women
- 9% People with disabilities
- 7% People with chronic illnesses
- 8% Repatriated people

DATA COLLECTION OUTPUTS

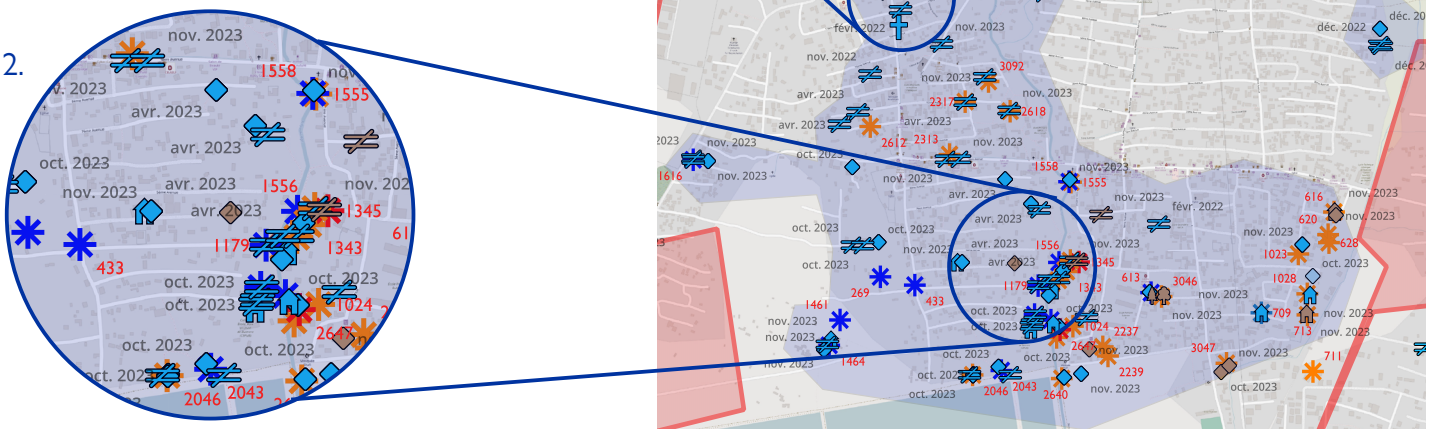
Data Collection Outputs were developed and disseminated to ensure accessibility of the collected data to colline-level CCRRCs, humanitarian actors, and decision-makers. Summaries and maps detailing Colline-level data from the pilot project were shared with stakeholders.

COLLINE-LEVEL SNAPSHOTS: These summaries were based on the first (25 snapshots) and second (64 snapshots) rounds of data collection and distributed to enumerators between data collection rounds and during the June workshop. Each snapshot included sex and age-disaggregated demographic data, highlighting impacts, influencing factors, consequences, and hazard-related solutions. Sankey charts visually represented the relationships between hazards, influencing factors, consequences, and solutions.





THE PARTICIPATORY MAPPING: This exercise generated 75 maps, which were distributed back to the data collectors. Following the second round of data collection, 14 maps covering multiple Collines and 63 Colline-level maps were created. These maps were also utilized in community validation sessions and distributed to CCRRC representatives and enumerators during the workshop. For example, in this map of Buterere 2B in Bujumbura, the highlighted area indicates individuals mainly mapping the flooding of churches, roads and bridges, suggesting better respect for construction practices and improved awareness.



ECHO-FUNDED PROJECTS

TUBEHONEZA: Building Resilience to Natural Disaster Risk in Burundi

CCRRCs

VRAs

In July 2020, ECHO funded one of the most comprehensive DRR projects in Burundi, which was implemented by IOM. The project aimed to support national and local efforts to build the resilience of the Burundian population to disasters. More specifically, the project addresses the risks of climate-related disasters and associated displacement by consolidating the country's disaster risk management (DRM) system in collaboration with the National Platform for Risk Prevention and Disaster Management (PNPRGC). The project established 133 CCRRCs in the 50 most vulnerable communes. The project carried out 119 VRAs in 119 communities in late 2021.

CI to Strengthen Humanitarian and Development Response Data Availability in Burundi on Natural Hazard Impacts and Internal Displacement Dynamics

CI TOOL | CASE STUDY | WORKSHOP

The project has the potential to significantly contribute to ECHO-funded VRAs, CCRRCs, and multi-risk mapping initiatives. Notably, the Collective Intelligence methodology used in part A of the survey operates on a similar framework as the VRA. The survey focuses on hazard assessment, impact analysis, causal factors, and proposed solutions. The methodology of this project's tool is partially informed by the VRA process, which relies on a form of CI. Given a highly variable and local nature of natural hazard exposure in many areas of Burundi, this tool serves as a means to scale up and tailor the VRA approach to specific contexts. By providing colline-level localised findings, the Collective Intelligence tool builds on the VRA's aggreation at the commune-level, ensuring effective risk management and

COMMUNITY CONSULTATIONS → ROUND 1 → ROUND 2 → COMMUNITY VALIDATION

133 CCRRCs established in 2020

CCRRCs established by TUBEHONEZA play an important component of the dissemination of information products to stakeholders.

CCRRCs

A 2-page colline-level snapshots of will be shared with respective CCRRCs and, where appropriate, reports at a higher administrative level (for example, at the municipal level after Round 2 of data collection.)

Leveraging the foundation of the 119 VRAs previously generated during the TUBEHONEZA project, project outcomes aim to enhance and localize the assessments at the colline level.

VRAs

119 VRAs carried out in late 2021 across 119 communities

The publications provide information on risk mapping, analysis of mapping results and an assessment of needs related to extreme weather events.

CI TOOL

CI data collection approach November 2023 - April 2024

The Collective Intelligence tool has been developed using participatory models and enables non-traditional data collectors to gather data. The results of the project are particularly strategic for integration into community development plans.

CASE STUDY

Case study created in June 2024

This joint publication will be an in-depth analysis of the key findings, productions, and most useful recommendations and data relevant for stakeholders, based on the entirety of the program; to be completed before the project close-out and targeted during the joint workshops between IOM and JIPS. This joint report should be a key product to supporting the sustainability of ongoing results and new interventions even after the project.

WORKSHOP

Workshop June 2024

The sharing of findings and reccomendations will occur during the June 2024 workshop. Similar to data collected during the VRAs, the data collected can enable local authorities to better analyse their overall context in terms of risk and vulnerability. In particular, this information would facilitate the implementation of local actions already undertaken by NGOs or partners.