![IOM International Organization for Migration logo]

STANDING COMMITTEE ON PROGRAMMES AND FINANCE

Thirty-fourth Session

THE GLOBAL DATA INSTITUTE: DELIVERING IMPACT THROUGH

DATA FOR ACTION, INSIGHT AND FORESIGHT – 2024 UPDATE

**THE GLOBAL DATA INSTITUTE: DELIVERING IMPACT THROUGH
DATA FOR ACTION, INSIGHT AND FORESIGHT – 2024 UPDATE**

Introduction

1.   Data are essential for delivering on the promise of migration, as reflected in the IOM Strategic Plan 2024–2028. As the pre-eminent source of migration and displacement data worldwide, IOM offers data for action to save lives and deliver solutions, data for insight to facilitate regular migration pathways, and data for foresight to drive preparedness and anticipatory action across its operations. IOM is building systems and data fluency to collect, safely store, analyse, share and apply disaggregated data and evidence across the mobility spectrum. Its extensive data and research repositories underpin evidence-based policies and practices. Data will be central to internal decision-making and management in the Organization.

2.   IOM's investment in the Global Data Institute (Box 1) – a part of the Department of Data, Insight and Policy Coordination – and its broader data and evidence function signals its commitment to transformative data that deliver impact on a global scale. The Institute provides:

(a)   **Data foundations** for primary community-level data for operations. The Global Data Institute's secure, at-scale system ensures sustainable, cost-effective data for action, insight and foresight. It fosters data fluency organization-wide thanks to standardized data collection at country level and end-to-end central, secure integration and analysis.

(b)   **Data for action,** to save lives and deliver solutions for internal displacement, including through the Displacement Tracking Matrix, which is used in most United Nations humanitarian needs assessments. Data analysis informs investments in displacement solutions, including by international financial institutions.

(c)   **Data for insight,** to facilitate regular migration pathways, including whole-of-route analytics on migrant sex, age, nationality, education and skills. Data work includes flow monitoring to enable the design of regular migration pathways[1] using computational capabilities, including those of regional data hubs.

(d)   **Data for foresight** for preparedness and anticipatory action, IOM being the United Nations leader in data-driven decision-making involving a whole-of-organization approach, at scale, in its global, regional and country-level planning and operations. The Global Data Institute works with other agencies and partners to provide timely analyses of emerging trends and population movements.

3.   This paper provides an update on the Global Data Institute's work since the Thirty-third Session of the Standing Committee on Programmes and Finance (November 2023) to deliver impactful data in the service of IOM's strategic objectives. Each section describes new data and analyses; data visualization and other techniques, including machine learning, used to augment analysis; and strategic partnerships.

---

[1]   Global Compact for Safe, Orderly and Regular Migration, Objective 1.

> **Box 1. Background, data collaboration, structure**
>
> The Global Data Institute leverages IOM's extensive global footprint, its deep understanding of the movement of people globally, its unparalleled global primary data-collection system and its collaboration with partners to serve Member States. IOM has strategic partnerships with other United Nations agencies and stakeholders in the United Nations Network on Migration. It works directly with beneficiaries and is at the forefront of data protection efforts within the United Nations system. The Institute creates synergies across its three units – the Displacement Tracking Matrix, the Global Migration Data Analysis Centre and the Data Impact and Strategy Unit – and within the broader Department of Data, Insight and Policy Coordination. It works across IOM in data-driven operations and collaborates with a network of regional data specialists to illuminate the global data story of human mobility. It is home to a large and growing team of data scientists, analysts and engineers in Berlin and at other locations.

Data foundations and data for action to save lives and protect people on the move

4.   IOM puts the safety, dignity and protection of people first in the most challenging crisis response contexts in the world. There is no "one size fits all" approach to crisis response and data play an essential part in the development of tailored responses. In this respect, IOM prioritizes increasing the availability and use of data on the mobility, capabilities, vulnerabilities and needs of displaced, host and mobile populations. It is therefore able to centre its operations and those of its partners on the needs and rights of individuals, and on community well-being.

5.   Across the humanitarian system, data collection and analysis are hindered by fragmented tools and time-consuming manual set-ups and data management operations, resulting in limited insights and slow responses. This makes downstream consolidation and analysis manually intensive and inefficient; it also makes the results hard to compare. IOM is addressing this problem by investing in data foundations for operational data. In 2024 the priority is the Displacement Tracking Matrix, given the demand for the data it generates in the humanitarian and development sectors

6.   The Displacement Tracking Matrix provides the core data needed to inform action to save lives and protect people on the move. It is the primary source of community-level data on internally displaced persons (IDPs) and host communities, monitoring flows and collecting/analysing data in 100 countries on a quarterly or biannual basis; as such, it informs over 86 per cent of humanitarian response plans worldwide. It provides operationally relevant, people-centred data and analysis for emergency preparedness, response planning, transition, recovery and – increasingly – development programming.

7.   The Displacement Tracking Matrix's role as a trusted partner and key source of displacement data is widely recognized in the humanitarian system. Indeed, a recent review of the humanitarian response to internal displacement[2] recommends that the Matrix's de facto role as data provider for IDP core data should be formally mandated and properly resourced. Its role as a coordinator[3] of key inter-agency forums and processes for data and analysis is also central to IOM's broader contributions in this area.

---

[2]   Lewis Sida et al., *Independent review of the humanitarian response to internal displacement,* HPG report (London, ODI, 2024).

[3]   The Displacement Tracking Matrix coordinates inter-agency programmes, implements data strategies and drives improvements in data initiatives such as the Joint Intersectoral Analysis Framework, the Expert Group on Refugee, IDP and Statelessness Statistics, and the inter-agency Data for Solutions to Internal Displacement Taskforce. It chairs/co-chairs key country-level groups, including internal displacement data assessment and analysis working groups and other similar structures for collaboration and collective action on data.

8.   The Displacement Tracking Matrix is rolling out a central data dictionary and a central data warehouse comprising a multilingual repository to ensure consistency and compatibility across data sets; a form builder to reduce set-up time and streamline data collection; and an analysis suite to accelerate real-time data analysis. Its field operators are being trained to use this standardized approach and tool set for activities in the field. These efforts ensure execution of operational priorities while allowing flexibility, enhancing adaptability and promoting timeliness in humanitarian operations. They help the Displacement Tracking Matrix deliver data that are comparable, consistent, clean and queryable for field operations and decision-making at the operational and global levels. They have been made possible thanks to consistent support from Member States and new partners like Microsoft.

9.   Through a new partnership with the Complex Risk Analytics Fund (CRAF'd), IOM will further strengthen the Displacement Tracking Matrix's role as a data provider for the humanitarian system and help boost efficiency system-wide by enabling the use of large amounts of data in unprecedented spatial detail. The partnership will deliver a first-of-its-kind global data set offering comparable, sub-national mobility data from the Displacement Tracking Matrix's operations worldwide. Historically, humanitarian and mobility data were stored in different formats in national databases; this was an obstacle to data insights in and across crisis contexts. IOM and CRAF'd will consolidate and store data in a central repository that stands to benefit 42 million people in fragile crisis-affected settings by enabling faster, more targeted support and solutions to displacement.

10.   To better assist government efforts to support displaced and vulnerable persons affected by community conflict and violence, the Displacement Tracking Matrix has built on its long-standing experience in data collection and community stabilization in West and Central Africa to establish the Transhumance Tracking Tool. The Tool comprises an early warning system that captures real-time information on events and conflicts related to livestock mobility throughout the region, which is then shared with local governance systems to ease tensions before they escalate into conflict. Between 2020 and 2022, more than 6,000 early warnings were sent in 10 West and Central African countries.
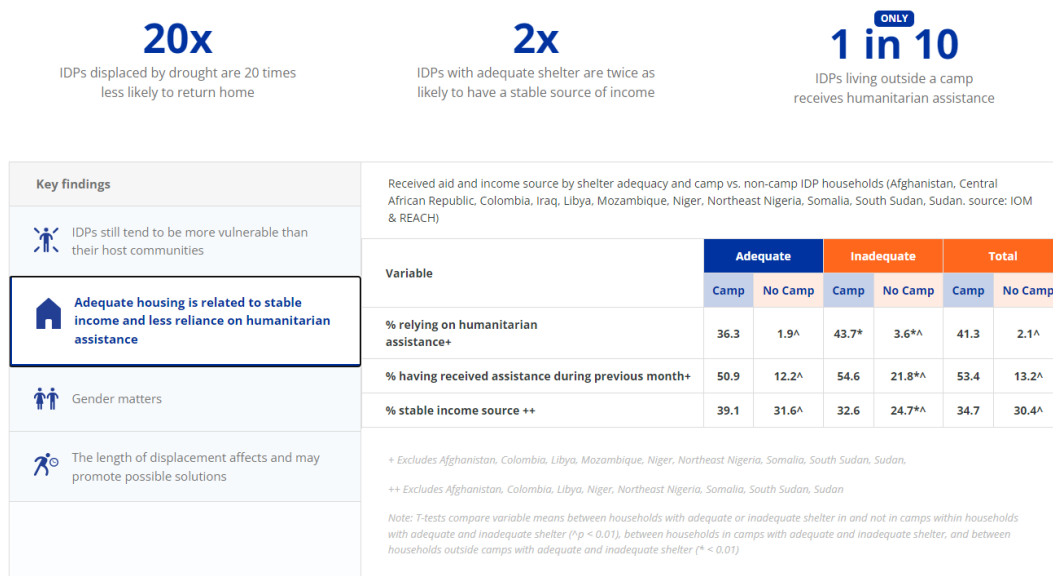

Box 2. Missing Migrants Project

The Missing Migrants Project – the only global open-access database on migrant deaths and disappearances – marked its tenth anniversary in March 2024 with new findings for practitioners and policymakers. The Project offers data-driven insights on migrant deaths, risks along major migration routes and profiles of the deceased. As the sole contributor of data on indicator 10.7.3 for measuring achievement of Sustainable Development Goal target 10.7 (safe and regular migration), it provides evidence to understand and address the risks of irregular migration and support decision-making on programmes and policies that facilitate regular pathways and protect those who are already on the move. The data collected on migrant deaths and disappearances over the past decade highlight the protection risks faced by many migrants. The more than 63,000 migrant deaths recorded by IOM are likely to be only a fraction of the actual number of lives lost worldwide, nor do they reflect the plight of a much larger number of people who have experienced other harms during migration, including violence, sexual abuse and trafficking. Collecting comprehensive and accurate data on the experiences of migrants along various migration routes is critical for IOM to continue mainstreaming protection across all its interventions. Through evidence-based programmes, IOM and its partners are able to address the protection risks faced by migrants on irregular routes and to create safe migration pathways to prevent them from undertaking these risky journeys in the first place.

Data for action to drive solutions to displacement

11.   Data-driven solutions for displacement are needed to build resilience and get people and host communities back on the pathway to well-being. IOM delivers data and analyses to strengthen collective action in support of solutions for over 70 million IDPs worldwide.[4] This is a central component of its institutional commitment and contributions to the United Nations Secretary-General's Action Agenda on Internal Displacement. It consists of two initiatives: the Periodic Global Report on the State of Solutions to Internal Displacement (PROGRESS), which IOM produces annually in partnership with Georgetown University in Washington, D.C., and in close consultation with Member States and partners across the humanitarian and development systems; and global and operational co-leadership on the inter-agency Data for Solutions to Internal Displacement Taskforce, in close coordination with the Office of the Special Adviser on Internal Displacement.

12.   The PROGRESS report is helping to shift the debate from when internal displacement ends to when solutions to internal displacement start.[5] The data analysis cycle delivers data that promote evidence-based investment in the factors enabling IDPs to move towards solutions. For example, the inaugural report revealed a correlation between adequate housing, stable incomes and reliance on humanitarian assistance; contained a comparative vulnerability analysis of IDPs and host communities; described the link between length of displacement and solutions; and underscored the importance of applying a gender lens to the issues around solutions to internal displacement (Figure 1).

Figure 1. Data promoting evidence-based investment for IDPs

20x
IDPs displaced by drought are 20 times less likely to return home

2x
IDPs with adequate shelter are twice as likely to have a stable source of income

ONLY 1 in 10
IDPs living outside a camp receives humanitarian assistance

Key findings

- IDPs still tend to be more vulnerable than their host communities
- **Adequate housing is related to stable income and less reliance on humanitarian assistance**
- Gender matters
- The length of displacement affects and may promote possible solutions

Received aid and income source by shelter adequacy and camp vs. non-camp IDP households (Afghanistan, Central African Republic, Colombia, Iraq, Libya, Mozambique, Niger, Northeast Nigeria, Somalia, South Sudan, Sudan. source: IOM & REACH)

Variable	Adequate		Inadequate		Total	
	Camp	No Camp	Camp	No Camp	Camp	No Camp
% relying on humanitarian assistance+	36.3	1.9^	43.7*	3.6*^	41.3	2.1^
% having received assistance during previous month+	50.9	12.2^	54.6	21.8*^	53.4	13.2^
% stable income source ++	39.1	31.6^	32.6	24.7*^	34.7	30.4^

+ Excludes Afghanistan, Colombia, Libya, Mozambique, Niger, Northeast Nigeria, Somalia, South Sudan, Sudan.

++ Excludes Afghanistan, Colombia, Libya, Niger, Northeast Nigeria, Somalia, South Sudan, Sudan

Note: T-tests compare variable means between households with adequate or inadequate shelter in and not in camps within households with adequate and inadequate shelter (^p < 0.01), between households in camps with adequate and inadequate shelter, and between households outside camps with adequate and inadequate shelter (* < 0.01)

Source: IOM, *Periodic Global Report on the State of Solutions to Internal Displacement (PROGRESS)* (Geneva, 2023).

---

[4]   Internal Displacement Monitoring Centre, *Global Report on Internal Displacement 2023* (Geneva, 2023).

[5]   The Global Data Institute and Georgetown University's Institute for the Study of International Migration reviewed multiple databases and organized 74 focus group discussions – involving over 570 IDPs, host community members and returnees across 10 countries, 12 partners and 15 governments – in order to test hypotheses and conduct a comparative analysis of vulnerabilities within those groups. This work builds on that done by the Inter-Agency Standing Committee (IASC) and the Expert Group on Refugee, IDP and Statelessness Statistics, specifically the IASC Framework on Durable Solutions for Internally Displaced Persons, the International Recommendations on Internally Displaced Persons Statistics and the recommendations of the inter-agency Data for Solutions to Internal Displacement Taskforce.

13.   **Outlook**. PROGRESS 2024 covers 30 countries and includes analyses of urban displacement, local integration, the climate–conflict–displacement nexus and solution pathways. It is convening evidence-based consultations with governments, multilateral development banks and international financial institutions on the use of data and analysis in driving development financing for solutions to internal displacement. At one such consultation, convened in Washington, D.C., on the sidelines of the April 2024 meetings of the International Monetary Fund and the World Bank, 38 representatives of governments, multilateral development banks, international financial institutions and philanthropic, international humanitarian and development agencies discussed evidence-based acceleration points for development financing of solutions to internal displacement, in line, for example, with the World Bank Evolution Roadmap.

Data for insight to facilitate pathways for regular migration

14.   In a context where the promise to leave no one behind and the Sustainable Development Goals are in danger of not being realized, IOM works to unleash the potential of migration by assisting States to establish, expand and enhance regular migration pathways while reducing irregular migration. Migration flows around the world are driven by a variety of factors, including environmental disruption and climate change, economic hardship and conflict. At a time of disruption and uncertainty, countries require consistent, comparable, disaggregated data to coordinate policies and programmes that can help capture the benefits of regular migration and reduce the negative impacts of irregular migration.

15.   The Global Data Institute provides data for insight into how to facilitate pathways for regular migration. It generates data analytics and modelling of migration and displacement drivers, and of correlated spatial and temporal patterns in population movements along routes across large geographical areas. It is a source of disaggregated data and analyses of the sex, age, nationality and skills of migrants and IDPs. It analyses and models community needs and impacts using Displacement Tracking Matrix flow monitoring and public data sets. Its comprehensive data and analysis at continental and community scale inform multilateral policy and programme coordination for regular migration pathways.

Figure 2. Global Data Institute data snapshots

Source: IOM, GDI Data Snapshot: Germany – May 24 (2024).

16.   In the first quarter of 2024, the Global Data Institute developed a comparable "data snapshot" on migration and displacement patterns over time, demographic information and drivers of population movements (Figure 2) for almost all countries. These country-level data visualizations use a programming approach to systematically visualize data collected by IOM and other open data sources generated by United Nations partners, the private sector and governments to facilitate informed discussions on patterns and trends in population movements.

17.   The Global Data Institute's country-level data repository also informs IOM analyses and publications, such as the Migration Governance Profiles. These data and related analytical outputs will be made available in an interactive form on the global Migration Data Portal giving internal and external stakeholders quick and easy access to the migration data most relevant for them so that they can generate transformative data stories that shape positive narratives on migration.

18.   **Partnership to analyse policy impacts**. Policy changes profoundly affect migration patterns but are poorly understood through a data lens. To address this gap, in mid-2024 the Global Data Institute will launch a partnership with Stanford University's Immigration Policy Lab to advance data analytics on the impact of policies and programmes on migration. The partnership will explore methodologies for migration policy impact assessments, produce thematic information products on policy impacts, provide advisory services on data-collection tools, and foster exchanges on data and technical expertise related to policy impacts on human mobility. It will leverage the Immigration Policy Lab's expertise in impact assessment and the Global Data Institute's operational data[6] to generate insights into policy effectiveness and inform evidence-based programming for regular migration.

19.   **Outlook**. In the second half of 2024, the Global Data Institute will begin rolling out continental data initiatives. It will thus enhance collective understanding of migration drivers, patterns and profiles along and across different priority routes and corridors, with a view to helping Member States coordinate more effectively and deliver evidence-based programmatic and policy responses that drive safe, orderly and regular migration. As part of this effort, the Institute will also deepen the statistical value of the primary data it generates by enhancing the Displacement Tracking Matrix methodology. For mobility tracking, improvements will be made to the quality of sex- and age-disaggregated data and geographic information on displaced populations and solution pathways, to enable more detailed analysis and comparison across crises. For flow monitoring, context-specific mobility scenarios will be adapted with more statistically robust and harmonized approaches across countries, regions and the main migratory routes. This will generate data to analyse migration routes and patterns, together with migrant profiles along the entire route. This unique primary data set will shed light on the underlying dynamics and drivers of irregular migration.

Data for foresight to drive preparedness and anticipatory action

20.   Data-driven preparedness, strategic foresight and anticipatory action lie at the core of IOM's work. Data can provide crucial information enabling policymakers to move beyond responding to migration dynamics to anticipating future challenges and adjusting policies, designing programmes and allocating resources. However, there is currently no (quantitative) understanding of how economic, social, environmental and other drivers interact with one another to generate migration in different parts of the world. There are no reliable scenario-based forecasts of how changes in climate and other drivers will affect future migration worldwide. To address this gap, the Global Data Institute is
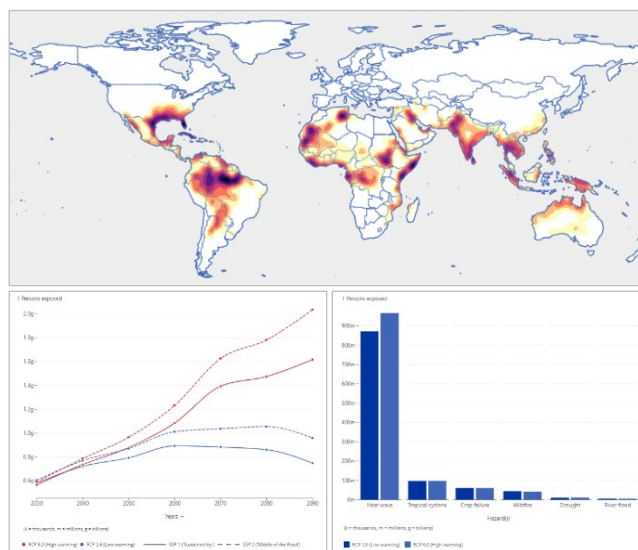
---

[6]   Drawn from the Displacement Tracking Matrix (which collects the comparable migration flow data needed to understand irregular migration flows), the Missing Migrants Project (see Box 2) and the Migration Governance Indicators (IOM's flagship tool for assessing migration governance frameworks at the national and local levels, rolled out in over 101 countries and 75 local jurisdictions).

undertaking two types of data-driven foresight: expert elicitation (six-month timescale) and modelling (three years and longer, particularly for climate change impacts).

21.   **Expert elicitation**. The Global Data Institute is employing a systematic modified Delphi expert elicitation process to assess complex, uncertain potential future population movements related to known drivers of migration and displacement for which no appropriate data sets are available for anticipating future trends. Expert elicitation draws on deep IOM field expertise to provide informed judgements based on collective experience and expertise. The approach yields assessments of potential changes in the magnitude of population movements, along with the likelihood and degree of certainty for countries and regions. The modified Delphi expert elicitation process produces biannual foresight for countries and regions in which IOM operates and contributes to the work of a whole-of-organization strategic foresight group informing IOM field missions.

Figure 3. Climate impact modelling

Source: IOM, Global Migration Data Portal, Climate Mobility Impacts (2023)

22.   **(Climate impact) modelling**. Climate, demographic and technological change are reshaping migration patterns everywhere. Where data sets are available and relevant time frames are longer, the Global Data Institute is developing a state-of-the-art global computational model to deepen the (quantitative) analysis of population movements in response to various drivers; the model provides quantitative answers to the above questions annually at a resolution of approximately 10km (Figure 3). It will provide insight into the areas of the world that have experienced higher in- or out-migration rates in the past 20 years, and will explain which environmental, economic, social and other drivers have affected these patterns, and how. Using scenario-based projections of migration drivers, the model will highlight which areas of the world are expected to experience increased in- or out migration in response to climate and other changes in the coming years. Once built, it can be used at regional level to investigate patterns and trends in local contexts.

23.   **Outlook**. To extend the reach and impact of its data-for-foresight work, the Global Data Institute is coordinating a whole-of-organization approach to strategic foresight with the Department of Humanitarian Response and Recovery, to enhance outcomes through preparedness and anticipatory action. The approach has three parts: data analytics and modelling (Global Data Institute); potential actions and timelines (led by the Department and coordinated across operations and with IOM country offices); and clarity on the effort required and results expected from anticipatory actions (including in terms of management and reform).

24.   The aim is to integrate strategic foresight into standard operating procedures in all relevant organizational processes, enabling anticipatory planning that facilitates preparedness and timely, effective deployment of resources to rapidly emerging population movements. In other words, operational efficiency will be enhanced through strategic resource allocation and advanced planning informed by foresight. Operational integration of foresight will lead to more timely life-saving actions and greater efficacy in delivering solutions to displacement and facilitating regular migration pathways. The Global Data Institute will contribute modelling and data analysis in a whole-of-organization approach to strategic foresight at country, regional and central level. By the end of 2024, IOM will have developed and tested the strategic foresight approach, which will then be presented to the IOM leadership with a recommendation for institutional support to pilot the approach in selected countries in 2025.

Conclusion

25.   With the guidance and support of Member States, IOM is shaping the work of its Global Data Institute to create impact through a data-supported approach to the practice of humanitarian support, designing and deploying durable solutions for internal displacement and using data as a basis for coordination among countries building regular migration pathways. In 2023, the first year in which it was fully operational, the Global Data Institute consolidated the solid track record of the Displacement Tracking Matrix and the Global Migration Data Analysis Centre, which had previously worked independently, with the work of several regional data hubs.

26.   This paper has summarized progress to mid-2024, which is characterized by the building of data foundations that benefit Member States and the United Nations system, providing standard primary data collection and analysis for deeper spatial, temporal and dynamic insights into displacement and population movements along migration routes. The Global Data Institute, together with the Department of Humanitarian Response and Recovery and other IOM departments/country offices, is deploying a whole-of-organization strategic foresight approach for preparedness and anticipatory action.

27.   The Global Data Institute will build on this momentum to provide essential data for action, ensuring more effective and people-centred humanitarian responses and facilitating the pivot to IDP solutions in the context of development. It will step up its contribution as a primary source of globally comparable data on population movements, supporting efforts to facilitate regular migration pathways and contributing to the wider policy work of the Department of Data, Insight and Policy Coordination on bilateral and multilateral agreements and programme design. By integrating data-driven decision-making at scale, particularly in anticipatory action and strategic foresight, it is hoped that IOM will be able to augment its data activities in the service of Member States, IDPs and migrants in positive, impactful ways.