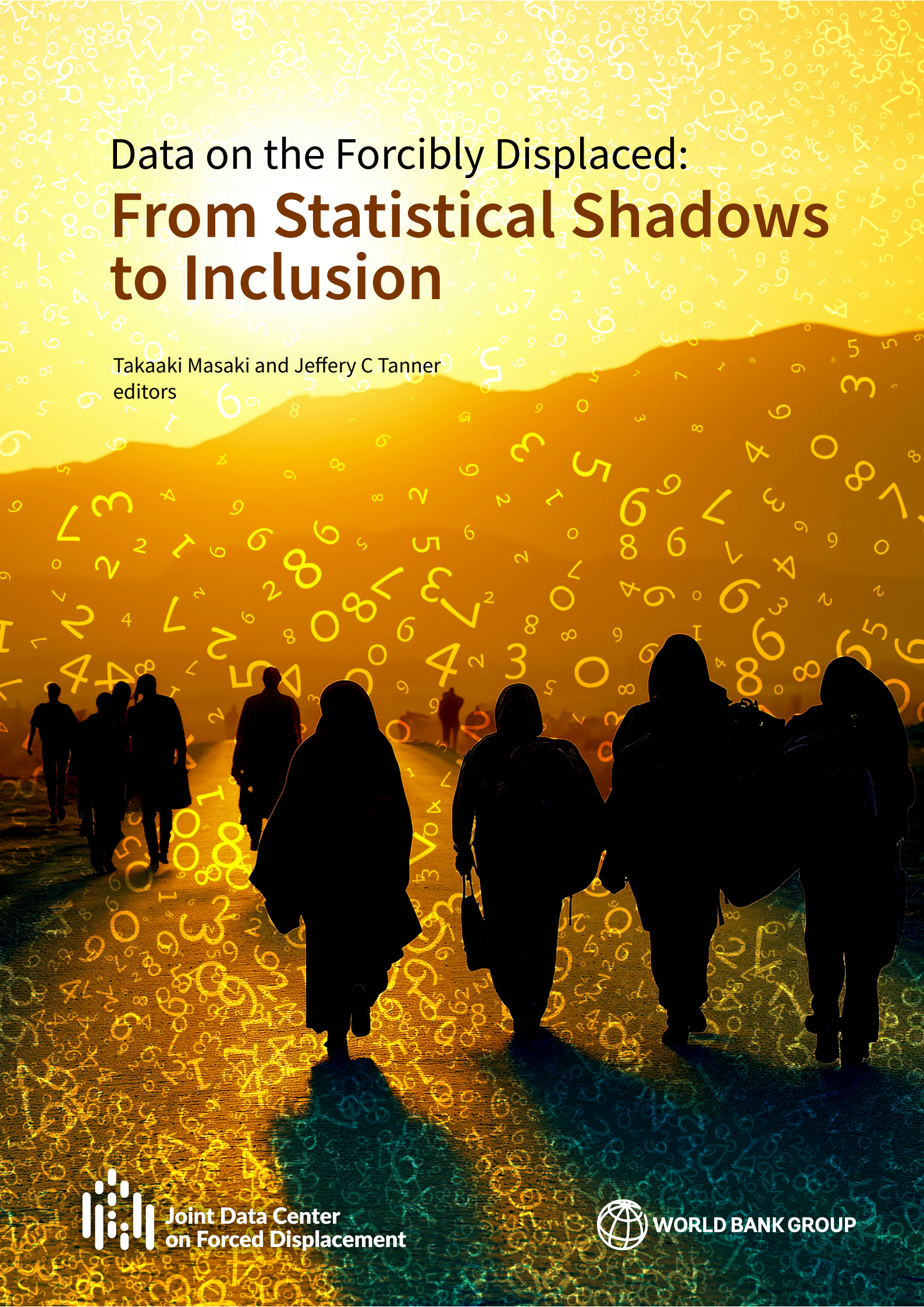
Data on the Forcibly Displaced:
From Statistical Shadows to Inclusion

Takaaki Masaki and Jeffery C Tanner
editors



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Contents

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Abbreviations and acronyms

ADDS	Djiboutian Social Development Agency
AERC	African Economic Research Consortium
CEGA	Center for Effective Global Action
CLCI	Cash and Livelihoods Consortium (Iraq)
CRRF	Comprehensive Refugee Response Framework
CNSS	Carte de la Caisse Nationale de Sécurité Sociale (Djibouti)
CWG	Cash Working Group (Iraq)
DANE	Departamento Administrativo Nacional de Estadistica (Colombia)
DoS	Department of Statistics (Jordan)
DRS	Department of Refugee Services (Kenya)
EA	Enumeration Areas
ECOWAS	Economic Community of West African States
EGRISS	Expert Group on Refugee, IDP, and Statelessness Statistics
EDAM	Enquête Djiboutienne Auprès des Ménages pour les Indicateurs Sociaux
EHCVM	Enquête Harmonisée sur les Conditions de Vie des Ménages (Central African Republic)
EoS	Elasticity of Substitution
EU	European Union
FCDO	Foreign, Commonwealth and Development Office (United Kingdom)
FDP	Forcibly Displaced Person/Population
FDS	Forced Displacement Survey
FIRE	Finance, Insurance and Real Estate
GCR	Global Compact on Refugees
GEIH	Integrated Household Survey of Venezuelan migrants (Colombia)
GOJ	Government of Jordan
HIES	Household Income and Expenditure Surveys
HNO	Humanitarian Needs Overview
HS	Harmonized System
IASC	Inter-Agency Standing Committee
IDB	Inter-American Development Bank
IDP	Internally Displaced Person
INSTAD	Migration Division of the Djibouti National Institutes of Statistics
IOM	International Organization for Migration
IPL	International Poverty Line
IRG	Internationally Recognized Government (Yemen)
IRIS	International Recommendations on IDP Statistics
IROSS	International Recommendations on Statelessness Statistics
IRRS	International Recommendations on Refugee Statistics
ISIC	International Standard Industrial Classification of All Economic Activities
JC	Jordan Compact
JDC	World Bank – UNHCR Joint Data Center on Forced Displacement
JIPS	Joint IDP Profiling Service
KAP-FD	Kenya Analytical Program on Forced Displacement
KIHBS	Kenya Integrated Household Budget Survey

K-LSRH	Kenya Longitudinal Socioeconomic Study of Refugees and Host Communities
KNBS	Kenya National Bureau of Statistics
LFS	Labor Force Survey
LMIC	Low- and Middle-Income Country
LTUR	Long-Term Undocumented Resident (Djibouti)
MA	Municipal area
MCNA	Multi Cluster Needs Assessment
MDL	Microdata Library
MoLSA	Ministry of Labor and Social Affairs (Iraq)
MoMD	Ministry of Migration and Displaced (Iraq)
MP	Migration Pulse (Colombia)
MPI	Multidimensional Poverty Indices
MRC	Migration Response Center of the IOM
MPCA	Multi-Purpose Cash Assistance
mVAM	mobile Vulnerability Analysis and Mapping
NGO	Non-Governmental Organization
NSO	National Statistical Office
OCP	Out-of-Camp Policy
ONARS	Office National d'Assistance aux Réfugiés et Sinistrés (Djibouti)
PEP	Special Stay Permit (Colombia)
PMT	Proxy Means Test
PPT	Colombia's Temporary Protection Permit
RAMV	Colombia's Administrative Registry of Venezuelan Migrants
RCM	Rapid consumption methodology
rCSI	reduced Coping Strategy Index
RHHS	Refugee and Host Household Survey (Kenya)
ROO	Rules of Origin
RPGPH-3	Third edition of the National Population and Housing Census (Djibouti)
RRPS	Rapid Response Phone Surveys
SESRE	Socioeconomic Survey of Refugees in Ethiopia
SEZ	Special Economic Zones
SPI	Statistical Performance Index (World Bank)
SPN	Social Protection Network (Iraq)
SWIFT	Survey of Well-Being via Instant and Frequent Tracking
UR	Universidad del Rosario
UN	United Nations
UN COMTRADE	United Nations Commodity Trade Statistics Database
UNHCR	United Nations High Commissioner for Refugees
UNSC	United Nations Statistical Commission
VAF	Vulnerability Assessment Framework
WASH	Water, Sanitation and Hygiene
WB	World Bank
WCO	World Customs Organization
WDR	World Development Report

Executive summary

Towards a clearer picture and better future for Forcibly Displaced Persons

This edited volume explores how better data can be generated and used to illuminate the challenges and opportunities encountered by forcibly displaced persons (FDPs) and inform policies that advance the socioeconomic welfare of displaced and host communities. The volume is divided into two parts. Part I examines challenges and opportunities for generating a better picture of the socioeconomic conditions of FDPs. It provides an in-depth account of the progress, remaining challenges, and actionable strategies for improving data collection, analysis, and policy application. Part II presents country case studies from low- and middle-income countries (LMICs) to highlight concrete examples of how governments and partners have worked to fill data gaps and translate evidence into better-targeted policies to monitor and improve the socioeconomic conditions of both displaced populations and host communities.

Forced displacement is at a record high. The United Nations High Commissioner for Refugees (UNHCR) estimates that by the end of 2024, there were 123.2 million people who had been forced to flee their homes because of conflict and related causes, of whom about 30 percent were refugees (36.8 million) and nearly 60 percent were internally displaced (73.5 million).[1]

Most of the world's displaced live in LMICs, often leading precarious lives in poverty. Around 73 percent of the world's refugees are hosted in LMICs, and 67 percent are hosted in neighboring countries. FDPs are often among the most vulnerable in society. They are disproportionately at risk of extreme poverty due to limited employment opportunities, asset losses and disruptions to their lives, livelihoods, and social networks.

Increasingly long periods of displacement necessitate long-term solutions promoting self-reliance and economic inclusion. Two-thirds of refugees, for example, have been in their host country for five years or more.[2] Disparities between the displaced and host populations are largely driven by restricted access to employment opportunities, which perpetuates dependence on aid and hinders refugees' paths toward self-reliance and economic integration. Fostering economic opportunities for displaced people can boost their resilience and self-reliance.

As aid budgets tighten, countries and partners must prioritize cost-effective and sustainable approaches. The "care-and-maintenance" model of hosting displaced populations is costly. Approaches that promote refugee self-reliance offer a more sustainable path, as they are more efficient and equity-enhancing.

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1 The balance were 8.4 million asylum seekers and 5.9 million other people in need of international protection. Displaced Palestinians do not fall under UNHCR's mandate as they are under the protection of UNRWA. See https://www.unhcr.org/refugee-statistics.

2 Outflows from the stock of FDPs are low but important. For example, less than 8 percent of displaced people returned home last year (3.2% of refugees and 11.2% of IDPs), and only 0.5 percent of refugees were recorded as being resettled to a third country (188,000). (UNHCR, 2025).

The shift from emergency response to sustainable development requires robust microdata to accurately design and deliver context-appropriate programming. Displacement data have most often been project-level, non-representative, and focused on short-term or humanitarian necessities rather than on the medium- and long-term social and economic characteristics and needs of the displaced, including income, education, and jobs. Robust and timely data on where displaced groups live, what services they use, and what barriers they face enable policymakers to design more effective, efficient and equitable policies.

LMICs often have an incomplete picture of the lives and livelihoods of displaced people within their borders. While there has been a surge in representative socioeconomic data collected in the last decade on the lives and needs of FDPs, there are still major data disparities across geography and sub-populations. Some countries seem data rich, but there is significant cross-country heterogeneity. The relative abundance of data in Africa, for instance, is primarily driven by three countries in East Africa – Uganda, Kenya, and Tanzania. Regional data deserts include West Africa and Central Africa. Countries like Iran, Russia, and Türkiye have particularly acute data deficiencies as they each host more than 1 million displaced people, yet there is no publicly available data on those populations.

Countries that have taken steps toward FDP inclusion in national statistical systems have become global champions of evidence-based policies for the economic and social integration of the displaced. When this "statistical inclusion" objective has been successfully integrated into national systems around the globe, it has positively influenced national policy debates. In Colombia, for example, survey findings guided national policies on integrating migrants into the labor market. In Iraq, data helped channel Internally Displaced Persons (IDPs) into government safety nets. In Kenya, panel data influenced legislation such as the Refugee Act 2021.

Data on the displaced are needed to fight global poverty. When data are available, they consistently show that displaced populations face higher poverty rates than nationals. However, the gap varies across countries. In Ethiopia, Kenya, Niger, and Uganda, poverty rates among refugees are significantly higher than among host populations. Similar patterns are seen among IDPs, with studies from Nigeria, Somalia, South Sudan, Sudan, and the Central African Republic indicating very high poverty rates among displaced populations. In other places, such as refugees in the West Bank and Gaza and IDPs in Yemen, the welfare and multidimensional poverty gap is narrower.

The welfare of FDPs is deeply intertwined with hosts' economic, social, and political conditions. Host community infrastructure, services, labor market strength, and attitudes, for example, play a crucial role in shaping refugee welfare. A thriving host environment provides FDPs with better access to employment, education, healthcare, and social networks, which in turn enhances their self-reliance and reduces dependency on aid.

Supporting the displaced to find stable and secure work is fundamental to helping them escape poverty. Expanding economic opportunities for the displaced is equally important for narrowing the gap between displaced and host populations. Often the displaced face both legal and non-legal barriers to social inclusion and economic integration. Regulatory reforms alone tend to be insufficient. Even in more favorable host environments, refugees, especially those living in camps, often face persistent barriers to accessing labor markets. Structural reforms and investments are vital to facilitate refugees' integration and contributions to the host economy. Employment beyond camps can foster social cohesion by enabling refugees to contribute to local economies and interact more with host communities, reducing tensions, and promoting mutual understanding.

Bringing the displaced out of the statistical shadows

Expanding data systems to draw the displaced out of the statistical shadows requires addressing financial, political, and technical elements of a data ecosystem. Financial constraints often prevent National Statistical Offices (NSOs) from including FDPs in routine data collection, but support from international partners can help close these gaps by providing funding for initial rounds to demonstrate the policy value of such data. Technical hurdles may

include procuring an accurate sampling frame or, in some cases, gaining access to displaced groups; here innovative methodological solutions may include mixed-mode surveys that combine face-to-face, phone, or internet-based approaches, the use of satellite imagery, or complementary qualitative data. Beyond financial and technical aspects, strong political commitment is critical; while it may seem paradoxical at first to use national resources to help noncitizens or out-group citizens, there are sound economic arguments and many examples for doing so.

This volume outlines five strategic priorities to strengthen displacement data ecosystems:

1. Promote integration and collaboration across national statistical systems.
2. Address political economy constraints that limit inclusion of displaced groups.
3. Develop or leverage robust sampling frames to generate representative data.
4. Complement traditional approaches with innovative and multi-method techniques.
5. Apply diverse analytical methods to translate data into actionable insights.

Integrating refugees into national statistical systems benefits all. When displaced people are not counted in a census or survey, they often miss out on access to public services. Ideally, data on displaced populations should be collected alongside, and with the same instruments, as data for the general population, preferably by NSOs. When refugees are included in household surveys and other official data sources, governments gain a clearer picture of the needs and conditions of all residents. This enables more precise targeting of social protection programs, education initiatives, and employment strategies. Knowing where displaced groups live, what services they access, and what barriers they face allows policymakers to design interventions that are more effective, efficient, and equitable.

Sustainability and policy impact are best achieved by embedding modules designed to identify the displaced within censuses and regular household surveys. Identification modules developed by, or following the guidance of, the UN Statistical Commission's Expert Group for Refugee, IDP, and Statelessness Statistics (EGRISS) are an excellent resource.

Countries that have taken steps toward statistical inclusion have become global champions of evidence-based policies. This volume includes case studies showcasing examples of such champions. When NSOs systematically collect data on marginalized groups such as FDPs, they strengthen the evidence base needed to design policies that support economic participation and social integration. NSOs are uniquely positioned to ensure that data systems reflect the full diversity of a country's population. Their leadership in data collection, analysis, and dissemination directly informs national development strategies, budgets, and program design.

Together, the evidence, insights, and examples presented in this volume make a compelling case for a more systematic and inclusive approach to data collection on forcibly displaced populations. A clearer picture of the lives of FDPs holds the promise of better policies and a better future. More and better data can foster their socioeconomic inclusion, resilience, and self-reliance, benefiting displaced populations and host communities alike.

PART 1:
Developing data for a sharper picture of the lives of forcibly displaced populations

Takaaki Masaki and Jeffery C Tanner

The need for data on **displaced populations is unprecedented**

CHAPTER 1.1

The need for data on displaced populations is unprecedented

This edited volume serves as a resource for country economists, national statistical offices, and others contemplating data collection on forcibly displaced persons (FDPs). This practical, example-heavy guide demonstrates the feasibility and value of displacement data. It examines how better data—through its generation, integration, and use—can provide a sharper picture of the lives of FDPs and inform policies that advance the complementarity of socioeconomic welfare of host and displaced communities.

Displacement is growing and lengthening, but budgets are shrinking

The confluence of five factors makes a compelling case for the need for actionable data to help displaced populations and their hosts. First, the numbers of displaced people are at a record high and continue to rise. Second, protracted conflicts are leading to ever longer lengths of stay in host communities. Third, those host communities are overwhelmingly in Low- and Middle-Income Countries (LMICs) that have limited resources. Fourth, international aid and humanitarian resources are under considerable recent strain. And fifth, no matter where they are, displaced populations are often among the most impoverished and vulnerable in society. Together, these factors point to the need for local, timely data that can be used to craft efficient policies aimed at supporting the self-reliance of displaced groups.

The number of people forced to flee their homes has reached a record high. The United Nations High Commissioner for Refugees estimates that at the end of 2024 there were 123.2 million people forcibly displaced worldwide. Of those, the vast majority – nearly 60 percent – were internally displaced (73.5 million). Indeed, there were more than twice as many internally displaced persons (IDPs) as refugees (36.8 million)[3]. Helping forcibly displaced people to rebuild their lives and livelihoods not only restores hope but revitalizes economies, societies, and communities.

Many experience displacement for extended periods. For example, two in three refugees have been in their host country for five years or more.[4] Such protracted displacement makes fostering economic opportunities for FDPs increasingly important. Restricting labor market access tends to impoverish already vulnerable people[5], expanding access can boost host economies and societies and strengthen the self-reliance and resilience of forcibly displaced persons. Allowing refugees to work freely in host communities not only has the potential to improve everyone's economic fortunes but to strengthen social stability. Employment outside camps can foster social cohesion by enabling refugees to contribute to local economies

3 In addition to IDPs and refugees, there are 8.4 million asylum seekers and 5.9 million other people in need of international protection. Displaced Palestinians do not fall under UNHCR's mandate as they are under the protection of UNRWA. See https://www.unhcr.org/refugee-statistics.

4 Outflows from the stock of FDPs are a relative trickle. For example, less than 4.5 percent of refugees returned to their homes last year, and only 0.5 per cent were resettled to a third country.

5 See, for example, Alrababah et al (2023), who find that better living conditions in the host country do not affect the desire to return to their home country; return intentions are driven instead by conditions in the home country.

and interact more with host communities, reducing tensions and promoting mutual understanding.

Gaining a better picture of the lives and needs of forcibly displaced people is critical in LMICs. Around 73 percent of the world's refugees are hosted in LMICs, and 67 percent are hosted in neighboring countries. At the same time, two-thirds of refugees have been in their host country for five years or more.[6] Because displaced people will likely be living in their low- and middle-income host country for some time, it is critical to support them where they are now. Consequently, while caring for humanitarian needs continues to be an issue for many FDPs, development actors are increasingly called upon for advice and support in longer-term solutions.[7]

In most contexts, FDPs are among the poorest and most vulnerable. They are disproportionately at risk of extreme poverty due to limited employment opportunities, asset losses, and disruptions to their livelihoods and social networks. When refugees and IDPs flee, they often leave behind productive assets, documentation, and accreditation. They also spend savings during their flight. If they are then forced to rely on aid as their primary income or are unable to access formal jobs, they can quickly enter informal and precarious work. These jobs are typically poorly paid and offer limited job security and legal protection. These dynamics perpetuate poverty rather than promoting self-reliance and resilience.

As aid budgets come under unprecedented pressure, data becomes even more vital for shaping policies that foster self-reliance and resilience among FDPs. Experience from the COVID-19 pandemic illustrates that when aid budgets contract, funding for forcibly displaced populations is disproportionately and negatively affected (Kim and Tanner, 2023). The traditional "care-and-maintenance" model of hosting displaced populations is costly. Approaches that promote refugee self-reliance offer a more sustainable path (Hoogeveen, Silva, and Hopper, 2025). Emphasizing measures that promote self-reliance can also partially offset reduced government and partner spending on welfare needs while simultaneously improving local economic growth.[8] Host countries, humanitarians, and development organizations can ill-afford inefficient spending. Representative microdata are critical to identify welfare gaps and service shortcomings and to inform well-targeted policy design—including strategies that expand access to labor and capital markets to strengthen resilience and independence.

Robust and timely data are indispensable for ensuring that scarce resources are used effectively, efficiently, and sustainably. In the current climate of high, protracted, and impoverished displacement in resource constrained contexts and austere international aid budgets, targeted and evidence-driven spending is imperative. Insufficient information about their socioeconomic status and needs hampers evidence-based policies to promote their economic inclusion and social integration in host countries. Data are necessary for crafting the evidence-based and targeted spending that can boost effectiveness and efficiency. Without appropriate, robust data, stakeholders base spending decisions on incomplete, biased information. Those decisions are unlikely to realize the gains in human and financial capital FDPs need to lead productive lives. Representative, timely data helps to identify both short and long-term needs to guide investments that foster self-reliance and resilience. It can identify opportunities to reduce long-term aid dependence.

Data availability on FDPs is generally sparse but has grown rapidly in the last decade

Until quite recently, data availability on FDPs had been low for decades. For much of the history of the UN and Bretton Woods institutions, only 1 microdataset per year on FDPs anywhere in the world had been made publicly available in the World Bank (WB) and UNHCR Microdata Libraries (MDLs). This relegation to the "statistical shadows" meant that understanding and policies for FDPs

6 Outflows from the stock of FDPs are important but small. For example, some 8 percent of FDPs returned home last year, including 11.1% of IDPs and 3.8% of refugees. Only 0.5 percent of refugees were resettled to a third country. (UNHCR, 2025).

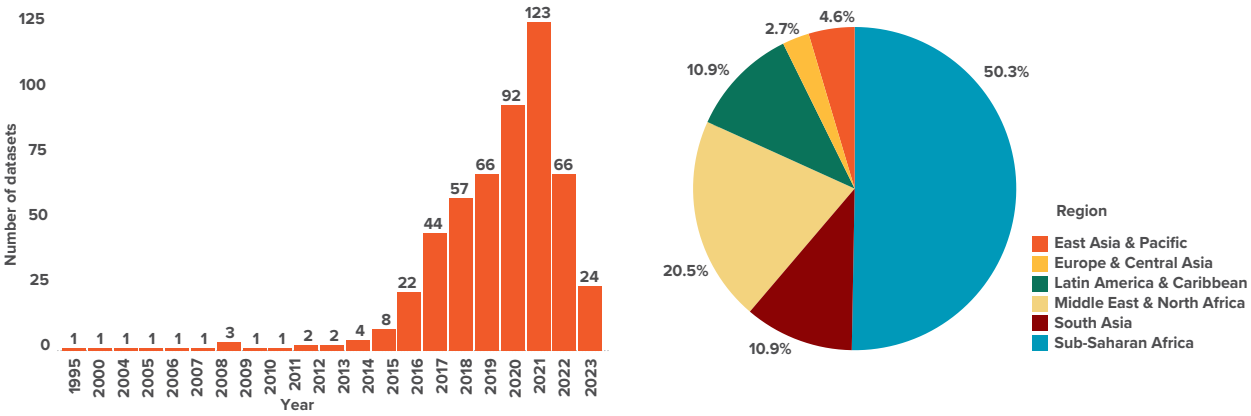
7 See for example, the World Bank's flagship World Development Report 2023, Migrants, Refugees, and Societies, World Bank (2023a).

8 See Sanghi, Onder and Vemuru (2016) for example.

FIGURE 1: Number of micro-level datasets having a representative sample of refugees, IDPs, and/or Venezuelan refugees and migrants

a. Annual increase in the number of datasets by year of data collection

b. Share of datasets by region



Sources: FDP micro-level datasets identified by WB staff based on the methodology established in Masaki and Madson (2023).
Notes: Panel A shows a trend in the number of FDP micro-level datasets added to the UNHCR/WB MDLs between 1995 and 2023 based on the year of data collection. Note that at the time of the Masaki and Madson (2023) study, many micro-level datasets collected in 2022 and 2023 were not yet incorporated into the UNHCR/WB MDLs, and thus the numbers for those years should be treated with caution. Panel B shows the breakdown of available micro-level datasets by region for all FDP micro-level datasets collected from 1995 to the first half of 2023.

were underdeveloped. However, a recent review of micro-level datasets in these MDLs[9] identified 522 publicly accessible micro-level datasets as of August 2024[10] that include representative samples of refugees, Venezuelan refugees and migrants,[11] and/or internally displaced persons (IDPs).[12] Figure 1 illustrates the number of these datasets over time, spanning from 1995 to 2023.[13] There has been a significant surge in the collection and publication of forcibly displaced persons (FDP) micro-level datasets within the UNHCR/WB MDLs, particularly after 2015. It is important to note that this upward trend could also be partially attributed to the fact that older micro-level datasets may only have been uploaded or published recently in the UNHCR/WB MDLs. For example, the UNHCR MDL, which was launched in 2019, has made efforts to retroactively include and publish older micro-level datasets collected before its establishment, but the extent of missing older datasets in the database remains unknown.

Data availability is still highly heterogeneous across regions and countries

Countries with more FDPs tend to also have more FDP datasets, but there are notable exceptions. Figure 2a plots the relationship between the size of forcibly displaced populations (or the total of refugees, Venezuelan refugees and migrants, and

9 Datasets that appear in other repositories including academic repositories or those of national statistical offices (as recommended by this publication), do not appear in these counts unless they are also cross-listed in the World Bank or UNHCR microdata libraries. The process includes manual verification, assessing geographical and thematic coverage. The update was performed in August 2024.

10 The corpus of micro-level datasets examined in this study includes both in-person and phone-based household surveys.

11 Venezuelan refugees and migrants are included in this analysis because they fall under UNHCR's mandate as Persons of Concern (PoC). According to UNHCR, Venezuelan migrants are individuals of Venezuelan origin who may need international protection under the Cartagena Declaration but have not formally applied for asylum. Regardless of their legal status, they require safeguards against forced returns and access to essential services (UNHCR 2020). In essence, since many Venezuelan migrants face circumstances similar to those of refugees, they are considered as such for the purposes of this analysis.

12 This analysis extends the data gap mapping analysis performed in Masaki and Madson (2023) and covers the 59 low-income and middle-income countries in which the number of refugees, Venezuelan refugees and migrants, or IDPs exceeding 100,000 as of 2021 or 2023. For this mapping exercise, we include only publicly available individual- or household-level survey datasets—such as microdata from household surveys, censuses, or administrative sources—that contain a representative sample of forcibly displaced populations (refugees, internally displaced persons, or Venezuelan migrants/refugees). To be included, the dataset must clearly document that probability sampling was used to ensure representativeness for the target displaced population. The methodology used to identify a representative sample of forcibly displaced people (FDP) datasets involves scraping metadata from UNHCR and World Bank microdata libraries, applying filters to select datasets that specifically sample refugees and/or IDPs.

13 The year 2024 was excluded because very few datasets collected in that year had already been published in the WB/UNHCR MDLs at the time this search was refreshed in August 2024.

IDPs combined) and the number of publicly available FDP datasets.[14] The upward slope seen in the plot indicates that there is a positive correlation between the number of FDPs and the number of publicly available FDP datasets.[15]

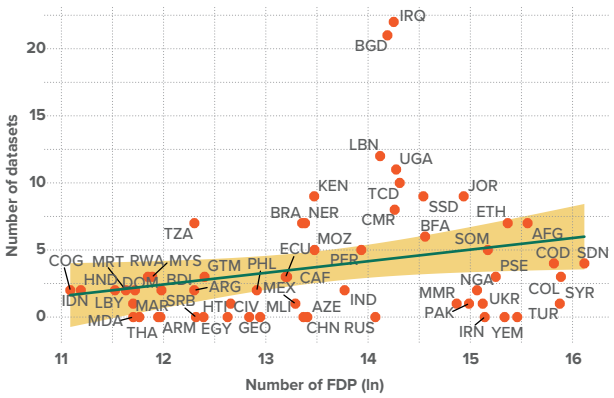
Some countries have more datasets than would be expected. Notable cases include Bangladesh and Iraq as well as three countries in East Africa – Uganda, Kenya, and Tanzania. All these countries lie far above the regression line as presented in Figure 2a. A relative abundance of data in East Africa is reflective of a broader data and evidence landscape in Africa. Indeed, these three countries are also among the top in the region with the largest number of general micro-level datasets in the WB MDL. Additionally, Kenya and Uganda are among the most extensively studied countries in impact evaluations (Sabet and Brown 2018).

Other countries are relative data deserts despite hosting large numbers of FDPs. Notable cases that defy the trend in Figure 2a include Iran, Russia, and Türkiye where the number of FDPs exceeds 1 million, but no publicly available dataset is found in these repositories. When simultaneously considering income, the number of FDPs and deaths from war (a proxy for factors endemic to displacement), the Europe and Central Asia region has far fewer datasets than would be expected, as illustrated by the regression results in Figure 2b.

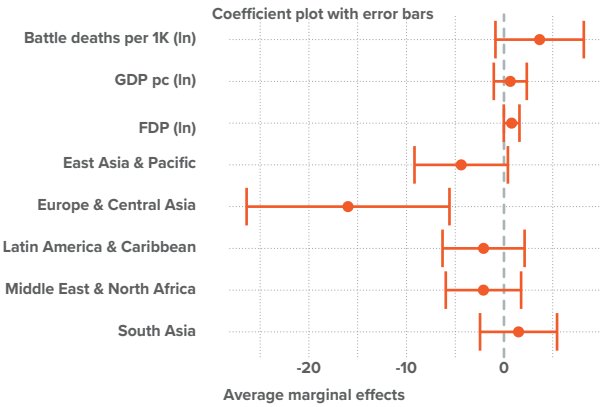
Although sub-Saharan Africa is relatively data rich, Western and Central Africa are comparatively data deficient. Despite hosting a relatively high number of FDPs, several countries in Western and Central Africa have fewer datasets than would be expected, as shown in Figure 2a. These include Côte d'Ivoire, the Democratic Republic of the Congo, Mali, and Nigeria.

FIGURE 2: Count of FDPs datasets by country characteristics

a. Number of datasets and number of FDPs



b. Country characteristics correlated with number of datasets



Notes: Panel A shows the bivariate relationship between the number of FDP datasets and number of FDPs (log-transformed). ISO 3-letter country codes are also shown in the scatterplot. Panel B shows the estimated average marginal effects of each variable based on the negative binomial regression. In the regression model, regional dummies are included where sub-Saharan Africa is a dropped category. Note that some survey datasets are stored as separate entries in the WB and UNHCR MDL even though they are indeed part of the same survey (e.g., entries by camp or by wave). Those independent entries are collapsed as one when they are part of the same survey. Lastly, this analysis only considers those FDP datasets that are not project specific and are collected after 2010 because any dataset that is project specific and/or collected before 2010 likely would have limited use for policy makers and development practitioners.

14 For this country-level analysis, we exclude those micro-level datasets that are collected prior to 2010 or project-specific datasets. Furthermore, some survey datasets are stored as separate entries in the WB and UNHCR MDL even though they are indeed part of the same survey (e.g., entries by camp or by wave). Those independent entries are collapsed as one when they are part of the same survey.

15 We identify a key set of country-level characteristics that may be correlated with the number of publicly available FDP datasets. These characteristics include GDP per capita (log-transformed) *(GDP pc (ln))*, the number of FDP (log-transformed) *(FDP (ln))*, as well as battle-related deaths (log-transformed) as a measure of conflict and fragility *(Battle-related deaths (ln))*. We also include regional dummies to capture those regions that are underrepresented after accounting for those baseline country characteristics. We apply a negative binomial regression for this analysis as our dependent variable is the count of FDP datasets in a given country.

Data blind spots blur the socioeconomic picture of the displaced, particularly for IDPs

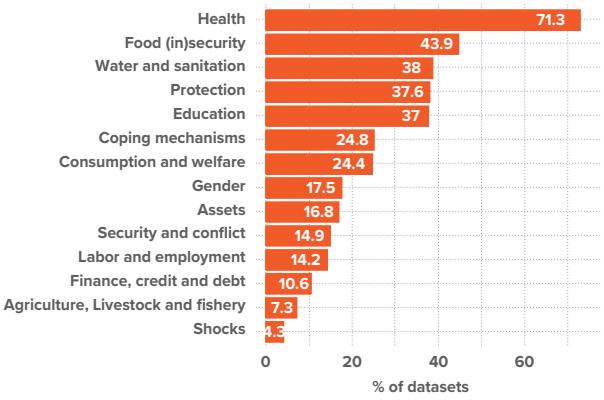
Despite the increase in data availability, representative information on socioeconomic conditions of FDPs remains scarce. Among the 522 FDP datasets identified as of August 2024, a significant portion of its sample is from beneficiaries of selected projects (Masaki and Madsen, 2023). These datasets may be valuable for assessing and monitoring the outcomes of specific initiatives or programs, particularly if their sample is statistically representative of beneficiaries; however, their usefulness for analyzing a wider population is quite restricted. Datasets derived from a narrow group of program beneficiaries comprise nearly 40 percent of all datasets in the MDLs. Consequently, any findings from the data conclusions are applicable only to that project's target population and are not relevant for broader applications by policymakers, development and humanitarian analysts, or researchers. These groups are thus consigned to the statistical shadows, and because they are unrepresented in national statistics, policymakers can include little relevant detail or targeting—making spending unlikely to be efficient.

Data tends to focus on short-term rather than long-term needs of FDPs. FDP datasets tend to focus heavily on immediate humanitarian needs, such as health, food security, and protection. FDP datasets also tend to fall short of covering significant social and economic dimensions of people's lives, including jobs, income, consumption, and education. As shown in Figure 3a, while 71 percent of datasets include health, and significant shares cover food insecurity (44 percent), water and sanitation (38 percent), only a small fraction address finance, credit and debt (11 percent), agriculture, livestock and fishery (7 percent), or shocks (6 percent). Compared to non-FDP datasets in the World Bank's MDL, gaps in labor and employment data are especially large (Figure 3b)—with the difference exceeding 50 percentage points—undermining efforts to assess labor market integration and long-term development outcomes. This narrow focus limits the ability to inform policies on economic stability, social cohesion, and sustainable inclusion. Furthermore, data collection often underrepresents vulnerable groups, such as women, youth, early childhood, and persons with disabilities, leading to critical gaps in understanding their unique needs and challenges and subsequently hindering inclusive policymaking.

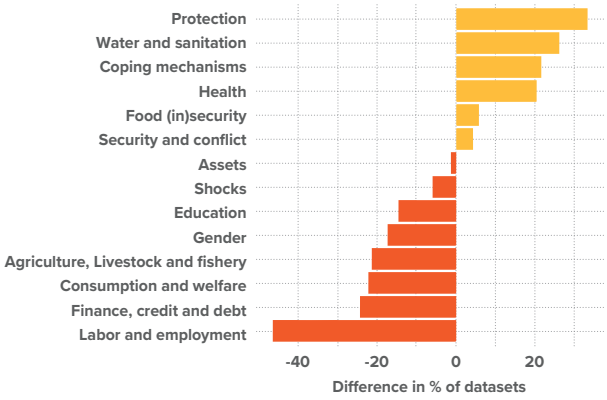
Representative data for IDPs are particularly scarce. Only 32 datasets in the MDLs have a sample of IDPs.[16] This is striking given that IDPs today account for about 60 percent of the total

FIGURE 3: Prevalence of topics in FDP datasets

a. Share of FDP datasets with topic covered by a survey module



b. Percentage point differences between FDP and non-FDP datasets in topical coverage by a survey module



Notes: Panel A shows the percentage of non-project-specific FDP datasets collected after 2010 (N=314) covering each of the 14 different topic areas. See Masaki and Madson (2023) for further details on the procedure used to code the topic area of a dataset. Note that these policy areas are not mutually exclusive, and a dataset can cover multiple different topic areas. Panel B shows the differences in the percent of datasets covering these topic areas between FDP datasets and all non-FDP datasets collected after 2010 in the WB MDL (N=726).

16 As noted previously, some survey datasets are stored as separate entries in the UNHCR and WB MDLs even though they are indeed part of the same survey (e.g., entries by camp or by wave). Those independent entries are counted as one dataset when they are part of the same survey, thus resulting in a total number of 32 IDP datasets excluding those datasets that are project specific or collected before 2010. As with refugees, these counts do not include datasets that identify IDPs but that are stored outside of the WB/UNHCR MDLs, such as official national statistics or academic repositories.

FDP figure. The paradox of IDPs finding themselves in the statistical shadows is that although they are the largest yet least represented group of FDPs, as citizens of the countries where they live, the national statistical offices of their countries have a responsibility to represent them. The Syrian Arab Republic, Colombia, Yemen, Ethiopia, Myanmar, Palestine, and Türkiye all have more than 1 million IDPs and yet have no publicly available FDP datasets designed to sample specifically from IDPs in these MDLs. Collecting representative data on IDPs is difficult because reliable sampling frames rarely exist; where registration systems do exist, they are often incomplete and quickly out of date (Baal & Ronkainen, 2017). The challenge is compounded by restricted physical access in fragile, insecure contexts and by the fact that many IDPs live dispersed among host communities—especially in cities—making them hard to identify (Baal & Ronkainen, 2017). There may be several reasons for this scarcity – as national citizens, they may already be included in surveys but not identified as IDPs or international organizations may be less inclined to fund data collection on IDPs than on refugees; alternatively, political economy considerations may limit a government's appetite for calling attention to challenges faced by IDPs, particularly if IDPs are from a politically disadvantaged "out-group." Potential solutions should identify and address the causes of this shortfall, whether they are technical, political, or financial.

Recent initiatives are spurring sustained growth in microdata coverage of FDPs

Statistical inclusion can drastically improve data quality, public acceptability, and policy accuracy. Most FDP data collection efforts can be arrayed on a spectrum of statistical inclusion, or how well integrated into national statistical systems is the FDP data collection. Full "statistical inclusion" is the benchmark for socioeconomic data on displaced populations. It denotes data collection efforts that are implemented with comparable representative host and displaced samples for whom data were collected simultaneously and with the same instrument, through or in close coordination with the NSO. Infusing FDPs into such national statistical exercises improves cost efficiency, quality, and the use of data over standalone FDP-dedicated instruments. Efforts towards embedding FDPs within official data systems have increasingly been applied in national statistical exercises such as population censuses, household budget surveys, and international survey programs like the Demographic and Health Surveys. These broad-based instruments are crucial for understanding the socioeconomic situations of people, including forcibly displaced populations, for at least two reasons: comprehensiveness and coverage (WDR 2023).

- **Comprehensive picture of demographic and living conditions:** They provide detailed insights into living conditions, livelihoods, and social integration of individuals and families. This is critical for tailoring interventions and policies.
- **Coverage and comparability with other populations:** They offer broad demographic and geographic coverage, enabling long-term tracking and cross-regional and group comparisons, despite limitations in capturing rapid changes or marginalized groups.

The count of exercises demonstrating full statistical inclusion of both host and displaced populations is small but growing. Within the 522 FDP datasets found in the World Bank or UNHCR microdata libraries as of August 2024, Table 1 lists the only 14 known large-scale full statistical inclusion efforts that have been completed. These statistical inclusion successes not only fill critical evidence gaps but also strengthen national ownership and comparability across populations.

Initiatives such as those spearheaded by the World Bank – UNHCR Joint Data Center on Forced Displacement (JDC) should lead to steady growth in the pipeline of new datasets in the coming years, including efforts that foster statistical inclusion. Indeed, there is already a substantial list of micro-level datasets not included in this data gap-mapping exercise that should contribute to filling these gaps[17] when they are completed (see examples in Table 2). The rapid expansion of survey efforts outlined

17 Because the analysis in this section follows Masaki and Madsen (2023), which examines growth and representation in the World Bank and UNHCR MDLs as a proxy for global trends in FDP data, it is possible that the gaps identified in this section may be filled by datasets like those in Table 2, even if these new datasets do not appear in the MDLs because they are national surveys or part of the DHS or MICS which have their own repositories.

above suggests that the microdata available through the UNHCR and World Bank MDLs will continue to expand at pace, offering development actors, host governments, and the research community a much stronger foundation to design inclusive policies and monitor the well-being of FDPs over time.

Table 1: Recent examples of FDP inclusion in national statistics through household surveys

Country	Survey	Are FDPs representatively covered in the data collection exercise?	Have appropriate identification questions been used to identify the forcibly displaced in data collection?	Have FDP data and results been integrated into the wider national data collection exercise?
CAR	Enquéte Harmonisé sur les Conditions de Vie des Ménages (EHCVM) 2020	Yes	Mostly	Yes
Chad	Enquéte Harmonisée Sur Les Conditions de Vie des Ménages (ECOSIT-4) 2018, with RCHCS	Yes	No	Yes
Chad	Enquéte Harmonisée Sur Les Conditions de Vie des Ménages (ECOSIT-5) 2022	Yes	Mostly	Yes
Ethiopia	Socioeconomic Survey of Refugees in Ethiopia (SESRE) 2023	Mostly	Yes	No
Uganda	DHS 2022	Mostly	Yes	Yes
Uganda	Refugee and Host Survey 2018, modelled onto Uganda National Household Survey (UNHS) 2016/17	Yes	Yes	Partially
Uganda	Uganda National Household Survey (UNHS) 2024	Yes	Yes	Yes
Honduras	Encuesta Permanente de Hogares de Propósitos Múltiples (EPHPM) 2022-2023	Yes	Yes	Yes
Lebanon	MICS 2023	Mostly	Mostly	Yes
Jordan	DHS 2018	Partially	No	Yes
Georgia	MICS 2018	Mostly	Partially	Yes
Colombia	DHS 2015	Partially	Yes	Yes
Peru	Encuesta Nacional de Hogares (ENAHO) 2024	Yes	Mostly	Yes
Iraq	Iraqi Household Socioeconomic Survey III (IHSES3) 2023	Partially	Mostly	Yes

Sources: JDC (2024); Author desk review.
Note: There are other examples of excellent data collected on displaced and local host populations that do not appear in this table because they were not collected through or with significant partnership with the national statistical office, such as the Cox's Bazar Panel Survey in Bangladesh. Datasets on Palestinians are not included in these counts because those groups fall outside the mandate of UNHCR; the UNRWA has the mandate for those groups.

Table 2: Pipeline of JDC-supported surveys on refugees and IDPs, 2022–2025

Year of data collection	Country	Title
2022-2024	Libya	Socioeconomic survey of refugees and migrants in Libya
2023	Ethiopia	Ethiopia Socioeconomic Survey on Refugees (SESRE) 2023
2023	South Sudan	South Sudan Forced Displacement Survey 2023
2024	Cameroon	Cameroon Forced Displacement Survey 2024
2024	DRC	Inclusion of IDPs in the Democratic Republic of Congo Household Living Conditions Survey 2024
2024-2025	Bangladesh	Inclusion of refugees, asylum seekers, hosts and stateless persons in the Bangladesh Multiple Indicator Cluster Surveys (MICS) 2024-2025
2024-2025	Djibouti	Inclusion of IDPs and refugees in the Djibouti National household survey (EDAM5) 2024-2025
2024-2025	Kenya	Inclusion of refugees and hosts in the Kenya Integrated Household Budget Survey 2024-2025
2024-2025	Malawi	Inclusion of refugees in the Malawi Integrated Household Survey 2024-2025
2024-2025	Mali	Inclusion of IDPs in the Mali Household Living Conditions Survey 2024-2025
2024-2025	Pakistan	Pakistan Forced Displacement Survey 2024-2025
2025	Sudan	Inclusion of IDPs and Refugees in Sudan High-Frequency Households' Welfare Monitoring Survey
2025	Yemen	Inclusion IDPs in the Yemen national Household Budget Survey (YHBS) 2025
2023-2024	Uganda	Inclusion of refugees in the Uganda National Household Survey 2023-2024
2024	Peru	Inclusion of refugees in the Peru Encuesta Nacional de Hogares (ENAHO) 2024
2024	Honduras	Inclusion of IDPs in the Honduras Encuesta Permanente de Hogares de Propositos Multiples (EPHPM) 2024
2022	Uganda	Inclusion of refugees in the Uganda Demographic and Health Survey (UDHS) 2022
2023	Lebanon	Inclusion of refugees in Lebanon Multiple Indicator Cluster Surveys (MICS) 2023
2024	Malawi	Inclusion of refugees in the Malawi Demographic Health Survey 2024
2025	Mozambique	Inclusion of IDPs in the 2025 Mozambique Household Budget Survey (IOF2025)

Source: The Join Data Center on Forced Displacement (as of August 2025).

Robust Data Illuminates

Policy Opportunities

CHAPTER 1.2

Robust Data Illuminates Policy Opportunities

This section examines the socioeconomic characteristics of FDPs, with a particular focus on welfare and poverty.[18] New data are shedding fresh light on how FDPs live, providing policy opportunities to strengthen their economic and social inclusion and integration. Although recent data are successfully shining the spotlight on the social and economic circumstances of FDPs, more work still needs to be done to close gaps and transform data into knowledge to better inform policy and programming to support FDPs effectively, efficiently and sustainably.

Displaced populations are typically significantly poorer than host populations

FDPs tend to be disproportionately at risk of extreme poverty due to limited employment opportunities, asset losses, and the disruption of livelihoods and social networks. Measuring poverty among displaced people is vital for identifying and supporting the most vulnerable in society. A small but growing number of countries now possess microdata that allow the disaggregation of welfare and poverty indicators for FDPs in comparison to other groups that are also of key policy concern. For example, Jordan (Chapter 2.5) offers an insightful case study where poverty comparisons were drawn between refugees living in camps and those outside, providing some of the first comparable insights into the poverty profiles of camped and non-camped refugees. Similarly, in Ethiopia (Chapter 2.3), the 2023 Socioeconomic Survey of Refugees in Ethiopia (SESRE) facilitated a comparison between in-camp refugees who seek economic opportunities outside the camps and those who do not.

Available data tend to show that refugee populations face poverty rates as high or higher than nationals. Figure 4 illustrates the differences in poverty rates between refugee populations and host communities across various countries. For instance, in Ethiopia and Uganda, the poverty rates among refugees are significantly higher than those of the host populations, indicating a substantial welfare disparity. Similarly, in Kenya and Niger, refugees also face greater poverty levels compared to locals. However, the data from Gaza and the West Bank show less disparity, with the poverty rates of refugees being closer to or even lower than those of the host populations. This figure underscores the challenges refugees face in achieving economic stability, often due to factors like loss of assets, limited rights, and restricted access to economic opportunities, which exacerbate their vulnerability to poverty.

Internally Displaced Persons (IDPs) are also often poorer compared to hosts. A comparative analysis of IDP socioeconomic profiles (Pape and Sharma 2019) reveals that IDPs are poorer and more vulnerable than host communities in Nigeria,

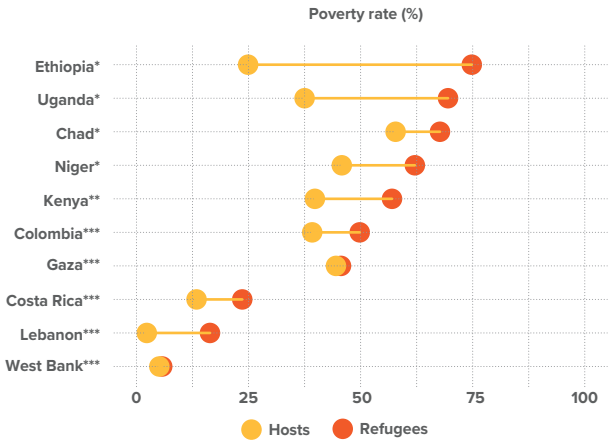
18 While not a comprehensive review, this section gleans insights from many of the data collection efforts contained in the repositories described above and the country cases presented in Part 2.

Somalia, South Sudan and Sudan. Indeed, more than 8 out of 10 IDPs in the four countries live in extreme poverty. In Iraq during the COVID-19 pandemic, IDPs had higher levels of unemployment, lower levels of educational engagement, and worse food security than nondisplaced households or even than IDP returnees (Krah et al., 2021). A similar pattern was found in excellent data from the Central African Republic (CAR) where the poverty rate among IDPs residing in camps is 76 percent, which is higher than that of non-IDP households (69 percent) and households hosting IDPs outside of camps (68 percent). This aligns with the fact that camp residents experience more frequent shocks, adopt negative coping mechanisms, and face lower human capital outcomes as well as more restricted livelihood opportunities compared to the rest of the population. However, highly detailed data on migration histories of IDPs in CAR also allowed for the comparison of IDPs to those who remained in their home villages, and further analysis revealed that for many welfare metrics, the differences between IDPs and those who remained were often not statistically significant (See Box 1). IDPs are often among the most vulnerable citizens in a country, along with those who could not flee areas of conflict, yet they are frequently unable to avail themselves of public services to which they have a right.[19] Further, they do not show up in administrative data and are missed or skipped by national censuses or surveys.

Low economic integration of FDPs reduces self-reliance and perpetuates poverty

Without the ability to work, displaced populations face a higher likelihood of forming aid dependency and experiencing poverty cycles. When refugees are unable to access formal employment opportunities, they are often forced into informal or precarious work, which typically offers lower wages, little job security, and limited legal protections. This economic marginalization restricts their ability to earn a stable income and perpetuates poverty. Helping refugees find stable and secure work is essential to underpin self-reliance and to escape poverty.

FIGURE 4: Differential poverty rates for hosts and refugees



Notes: Poverty lines used – (*) PPP$2.15; (**) PPP$3.65; (***) PPP$6.85.
Sources: See Hoogeveen and Hopper (2024). Chad - 4th National Harmonized Survey on Households' Consumption and Informal Sector 2018; Colombia – Gran Encuesta Integrada de Hogares (GEIH) Survey – Encuesta Pulso de la Migración; Costa Rica - National Household Survey, La Encuesta Nacional de Hogares (ENAHO) 2021; Ethiopia SESRE 2023; Kenya - Integrated Household Budget Survey 2016; Lebanon - Vulnerability Assessment Panel 2022; Niger - EHCVM 2018; Uganda - Refugee and Host Communities Household Survey 2018; West Bank and Gaza - Palestine Expenditure and Consumption Survey 2023.

Once the immediate humanitarian needs of displaced people have been addressed, de facto access to formal labor markets is critical for creating strong economic foundations for their future. Often the displaced face both legal and non-legal barriers to social inclusion and economic integration. In Ethiopia, for example, the government has established a legal framework that allows refugees to obtain work permits. However, significant barriers—such as restrictions on movement, skills mismatches, and limited local demand—still hinder access to employment. As shown in Figure 5, in-camp refugees are significantly poorer and have substantially lower rates of labor force participation and employment than host households (Chapter 2.5). Most rely on aid as their primary source of income. This is unlikely to be sustainable. Facilitating refugees' access to labor markets outside camps as early as possible is essential for their integration (Fasani et al., 2022; Slotwinski et al., 2019), helping to mitigate long-term consequences like unemployment or inactivity. Moreover, once the situation in the home country stabilizes, savings from labor earnings can facilitate the common desire of displaced households to return home safely.

19 For example, IDPs in Iraq were far less likely to receive public support transfers during COVID because they lacked papers, having left them behind when they were forced to flee, or were outside of their home jurisdictions responsible for distributing benefits (Krah, Phadera, Tanner and Mugera, 2022).

BOX 1: Measuring the welfare of the displaced: Innovations in data, sampling, and analysis from the Central African Republic (CAR)

IDP-sensitive sampling frames and survey instruments
Collecting representative data on recently displaced populations can pose unique challenges due to their mobility, settlement patterns, and the security concerns that complicate fieldwork. In the Central African Republic (CAR), the 2021 Enquête Harmonisée sur les Conditions de Vie des Ménages (EHCVM) addressed these challenges by explicitly sampling 496 out of 6,437 households from official IDP camps using UNHCR lists, while 5,941 households were selected from 500 enumeration areas based on the 2003 national census. The survey pursued statistical representativeness across CAR's seven regions and both urban and rural contexts.

Crucially, in addition to including an EGRISS-style identification module, the questionnaire collected detailed displacement histories—including displaced individuals' prefecture, sous-préfecture, and commune of origin—enabling the construction of "catchment areas." These origin-based subnational units allowed meaningful counterfactual comparisons between IDPs and those left behind in the same conflict-affected communities. The study illustrates successful integration of forcibly displaced populations into national statistical systems, aligned with emerging international recommendations such as the IRIS framework by EGRISS.

Analytical approaches
The study compared in-camp IDPs with three distinct groups: the national out-of-camp population, displaced populations' prefecture-level catchment areas of origin, and more granular sous-préfecture-level catchment areas. This multi-tiered comparison addressed non-random selection into displacement and helped isolate the aftermath of displacement from pre-existing community-level deprivation. The analysis relied on linear and probability regression models across a suite of welfare indicators.

Key findings across comparison groups
When compared with the general population, in-camp IDP households are significantly worse off: They have 23.7 percent lower per capita consumption and an 11.5 percentage point higher food poverty rate. However, the pattern changes when the comparison group is restricted to sous-préfecture-level catchment areas of origin to better account for pre-existing poverty. Those comparisons indicate that observed differences shrink and are largely nonsignificant for consumption, food security, and multidimensional poverty. Indeed, only benefits in infrastructure measures—electricity, water and sanitation—remain statistically significant in this more granular comparison, and even though the welfare gaps in these measures remain statistically significant, their magnitude is still attenuated.

Implications for data collection and policy
These findings highlight the value of survey designs that are highly sensitive to displacement. Data collection should consider three-step approaches—first identifying IDPs, then collecting pre-displacement information through recall or longitudinal tracking, then systematically surveying their communities of origin. Although such analysis cannot disentangle self-selection of those who decided to flee, juxtaposing their welfare against the counterfactual of their contemporaries who remained presents a compelling comparison and improves understanding of household-level drivers and subsequent aftermath of displacement. From a policy standpoint, while in-camp IDPs remain among the poorest relative to the general population, those who stayed behind in conflict-affected areas exhibit similar or worse deprivation across many dimensions, particularly in service access. Therefore, humanitarian interventions must balance immediate support for IDPs with longer-term investments in origin communities. Strengthening the capacity of national statistical systems to integrate displaced and origin populations into household surveys, as done in the EHCVM, can facilitate visibility and inclusivity in official poverty and welfare monitoring.

Source: Lain, Yama, and Hoogeveen (2024).

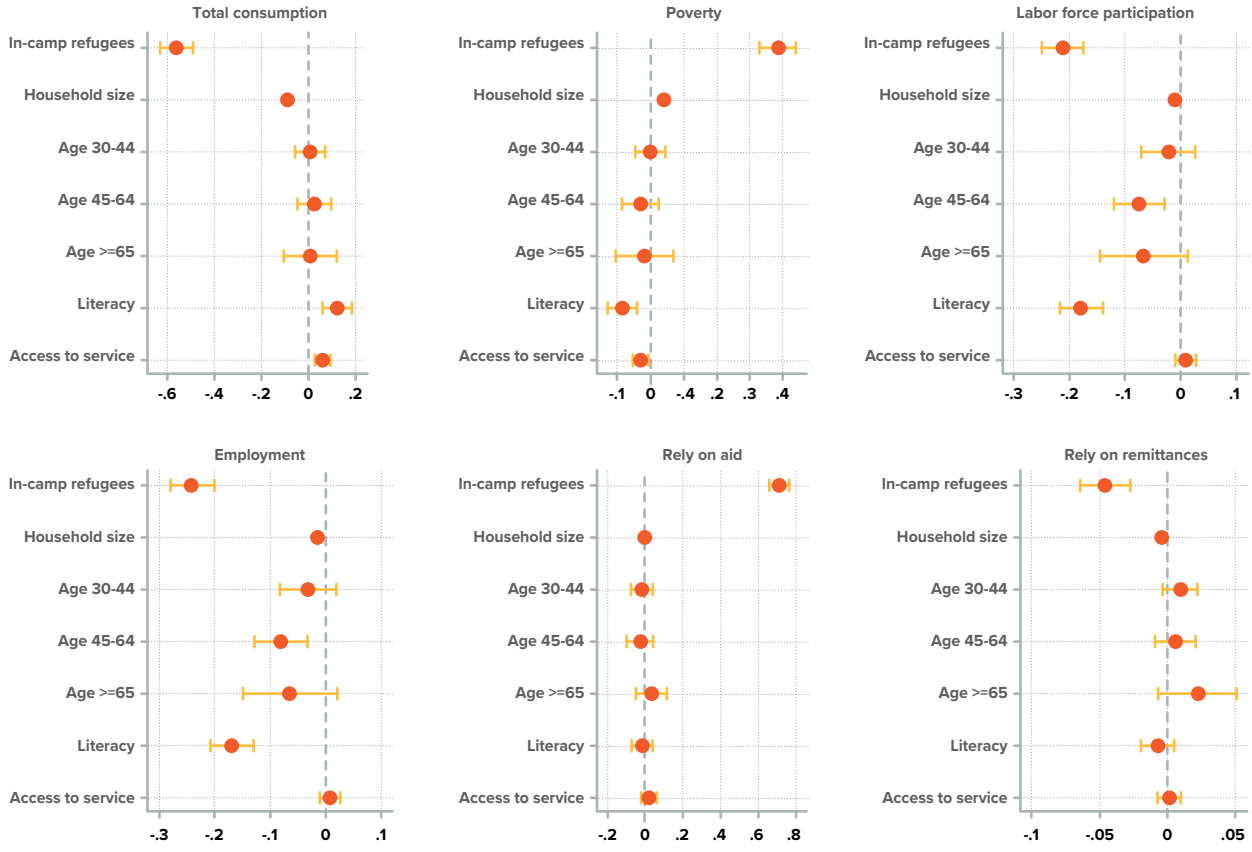
Colombia has taken steps to help Venezuelan refugees and migrants to find job opportunities which have boosted their prospects. Colombia has pioneered programming to harmonize policies, facilitate socioeconomic integration, and ensure protection for those displaced by crisis. Colombia's programming reflects the aims of the 2018 Quito Process to develop regional responses to the influx of Venezuelan refugees and migrants and builds on the principles of the 1984 Cartegena Process to address the protection of refugees, displaced and stateless persons to allow Venezuelans to access labor markets. Colombia's policy response has led to large gains in consumption, income, and health for migrants and negligible changes for hosts. Indeed, Colombia saved money and spurred growth

through this large-scale regularization program (Ibáñez et al., 2024).

Kenya's experience highlights the challenge of creating economic opportunities to expand earnings potential for refugees. In Kalobeyei, refugee labor force participation remains very low; most adults are outside the labor market, and those that are employed are often limited to low-paying incentive or informal activities (Chapter 2.7). Heavy dependence on aid underscores the limited role of current employment in sustaining livelihoods. Structural barriers, including difficulties in obtaining work permits, restrictions on mobility, and lack of access to capital and market linkages further curb opportunities for advancement. This highlights the need for economic integration strategies that go beyond granting labor market access, focusing instead on improving job quality, expanding earnings potential, and enabling more sustainable pathways to self-reliance.

Yemen is an example of how even in extremely fragile contexts, useful data can be collected on jobs and livelihoods. Insecurity, weak infrastructure, and a fragile economy sharply limit labor opportunities for displaced populations, regardless of skills or legal status. This results in severely restricted livelihood options for the displaced. Humanitarian assistance often remains the main income source of support for displaced people for prolonged periods (Chapter 2.9). It is vital for economic inclusion strategies to reflect the realities of a country's security and infrastructure. In turn, those strategies need to be paired with targeted humanitarian support until market-based opportunities emerge.

FIGURE 5: Welfare disparities between refugees and host communities in Ethiopia



Sources: SESRE 2023; Chapter 2.3.
Notes: These plots show the results of the OLS coefficients on the following outcome variables: total consumption (sum of food and non-food expenditure) per capita (log-transformed), poverty using the USD2.15 international poverty line, labor force participation, employment, reliance on aid as the primary source of income, and reliance on remittances as the primary source of income.

Even in supportive policy environments like Niger, refugees face significantly higher poverty rates than hosts or IDPs. As described in Chapter 2.8, refugees in Niger enjoy *de jure* labor market access on par with nationals and are largely integrated within host communities rather than living in camps, but *de facto* barriers for refugees are significant. Refugees have legal rights to work, move freely, and access services in Niger. Refugee poverty is driven not by legal barriers but by poor economic conditions, limited land access, and lower returns on assets. Unlike in Ethiopia where most refugees were not granted work permits until recently, Niger has implemented a more progressive refugee policy framework that grants fundamental rights under the 1997 Refugee Law and relevant ECOWAS treaties. That framework includes the right to work, freedom of movement, and access to education, healthcare, and land. However, in 2019, refugee poverty stood at 67%, notably higher than among hosts (46%) and internally displaced people (IDPs) (62%). These disparities are not rooted in legal exclusion but in broader economic constraints, including limited access to land. IDPs, for example, have three times more land than refugees. Refugees also suffer from "latecomer effects" that limit their access to land to more undesirable plots in an already arid region. Most income differences between refugees and hosts stem from lower returns on assets rather than differences in asset ownership. Only 28% of the income gap between refugees and hosts is explained by observable factors such as endowments, while 72% is due to unexplained factors, reflecting poorer economic opportunities and market integration. For IDPs, 48% of the income gap with hosts is similarly driven by inefficiencies in asset utilization rather than lack of assets.

Camp economies are deeply interconnected with those of host communities

Although differences in endowments and returns may drive welfare disparities between refugees, IDPs, and host populations, the economies of camps and host communities are closely connected. Even when refugees reside in camps, they generally do not operate in a vacuum. Their well-being is shaped by the local markets, resources, and social networks in surrounding host communities (Betts et al., 2014, 2024; Werker, 2007). Many camps are in marginalized areas in which poverty rates are higher than the national average. Economic integration into these areas is more likely to reduce refugee poverty when access to labor markets is paired with freedom of movement. Moreover, camp economies are largely dependent on international organizations and donors, which can have positive effects on host economies (Rozo and Grossman, 2025). However, reliance on these funds is tenuous in the current international environment. Greater self-sufficiency and mobility can help offset austerity shocks.

Favorable host community labor market conditions do not necessarily improve labor outcomes for camped refugees. In Ethiopia (Chapter 2.3), evidence suggests no strong correlation exists between the labor outcomes of host communities and those of refugees living in camps. This applies to various labor outcomes, such as labor force participation, employment rates, off-farm employment, and wages.

Allowing refugees to work freely in host communities can benefit both refugees and their hosts. Policies would do well to ease restrictions on refugees' rights to work outside camps, as such limitations may prevent them from accessing better labor opportunities and integrating into local economies. Doing so can improve the economic outcomes of displaced households and contribute to the local economic development of the host community.

Refugees living outside camps still face significant barriers to economic integration

Welfare comparisons between camped and non-camped FDPs can be mixed, highlighting the need for robust data to inform context-appropriate policies. For most metrics of welfare, in most places, in times of shock or in more stable periods, displaced populations tend to do worse than host country population averages, irrespective of camp status (see Kim and Tanner (2023); World Bank

(2023b); Hoogeveen, Silva and Hopper (2025)).[20] Although direct welfare comparisons between FDPs living in camps versus those out of camps are limited, evidence from Ethiopia, Kenya and Uganda indicates that those out of camps have lower poverty rates than those in camps (Hoogeveen and Hopper, 2024). This may not hold for all contexts, however, as seen in the Jordan case in Chapter 2.5, for example. Even so, refugees living outside camps may have higher susceptibility to shocks (Kim and Tanner, 2023). Indeed, evidence from the COVID-19 pandemic indicates that refugees living outside of camps in Chad were more likely to stop work, and, as in Ethiopia, they were more likely to experience income losses than those in camps. However, IDPs in Burkina Faso were slightly less likely to experience income decreases if they lived in camps and there was no difference in stopping work. The share of the population receiving assistance during the pandemic showed inconsistent patterns across countries: Camped IDPs were more likely to receive help in Ethiopia and Iraq, but those outside of camps were more likely to report benefitting from assistance in Chad, and there was no statistical difference in Burkina Faso or Kenya (Kim and Tanner 2023). Although there is nonrandom selection in who leaves or remains in camps, understanding the nuanced differences in their welfare is critical for developing tailored policy responses to these very different circumstances. Ultimately, the relative welfare of camped and non-camped FDPs is an empirical question requiring high-quality local data to support appropriate policy responses that can address welfare heterogeneity while offering displaced groups opportunities for greater self-reliance.

Data on non-monetary dimensions of poverty can be helpful in understanding FDP decisions to stay in camps or venture beyond them. Where *de facto* situations allow for it, refugees may choose to live outside camps in search of freedom and a greater sense of control over their own fate. Freedom might be an overlooked dimension of welfare. Refugees living outside camps have more freedom of movement, autonomy, and economic opportunities, which might explain their preference despite higher risks. In contrast, camp residents face restrictions on movement and employment, which limit their autonomy. Previous research indicates that limited control over one's own circumstances—common among camp-based refugees who rely heavily on international aid—is linked to poorer mental health and economic outcomes (Wieser et al., 2024; Hahn et al., 2019; Thum, 2014; Tsionis et al., 2024; Hussam et al., 2022). In Jordan, for example, some refugees opt to live outside camps in pursuit of greater independence and freedom (Hoogeveen & Obi, 2024). Yet in Iraq those outside of camps were three times less likely to consume adequate diets than those in camps (Krah et al 2021). Conventional measures of poverty (monetary and multidimensional) might not fully capture the welfare of refugees, as they neglect other dimensions, like freedom or autonomy.

Making it easier for FDPs to work can unlock self-reliance and economic growth

Progressive refugee labor policies that ease market access can promote FDP self-reliance and integration and boost the wider economy. Jordan exemplifies how progressive policies like the Jordan Compact (JC) can integrate refugees into productive sectors, such as manufacturing (see Chapter 2.5). Established in 2016 between Jordan and the European Union (EU), the JC aimed to spur economic growth and employment by easing EU market access through relaxed Rules of Origin (ROO). It focused on agriculture, construction, and manufacturing, incorporating Syrian refugees into 18 EU-oriented Special Economic Zones (SEZs). In manufacturing, SEZ-based production benefits from tariff-free EU access if at least 15 percent of the workforce is Syrian. The Compact also aimed to support the issuance of up to 200,000 work permits. The share of Syrian refugee workers with permits in Jordan's export industries rose significantly over time. In 2017, fewer than half had permits, except in the Finance, Insurance and Real Estate (FIRE) sector, but by 2018–2019, most did. While the JC improved labor market integration, it did not lead to significant

20 There are examples where refugee populations in camps have better welfare metrics than the local host population near the camp—though these tend to be in more remote, rural camp settings. See the experience of Kenya in Hoogeveen, Silva and Hopper (2025), for example. This dynamic underscores the equity and political economy challenges associated with camp economies and the importance of data to more fully understand these challenges.

export growth, highlighting that easing regulations alone may not be sufficient to spur observable macroeconomic improvements. Broader structural reforms and additional initiatives may be needed to overcome underlying or complementary constraints. Still, other examples illustrate broader community effects of economic integration of FDPs (Rozo and Grossman, 2025).

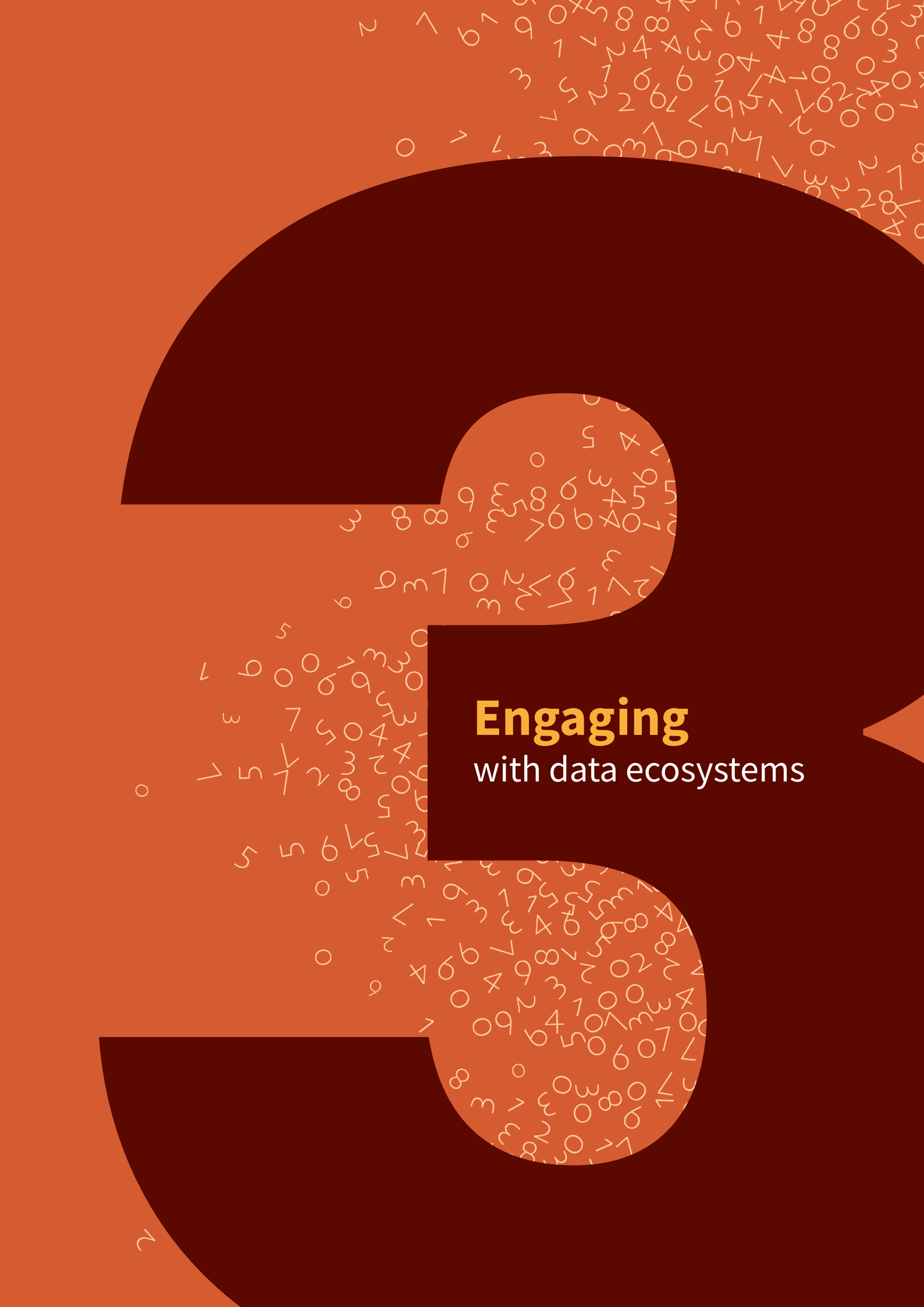
The welfare of host communities is linked to the welfare of displaced communities. The socioeconomic environment of the host community plays a key role in shaping refugee and IDP welfare. Host communities with higher levels of welfare and better infrastructure, such as electricity, clean water, and sanitation, are positively associated with improved outcomes for refugees. These resources not only enhance short-term welfare but also support long-term integration and self-reliance. In contrast, refugees living in economically disadvantaged communities face significant challenges in accessing basic services, which can perpetuate poverty and marginalize them from the social and economic life of the host country.

The attitudes of host communities also affect FDP welfare. Positive perceptions of refugees among host communities are closely tied to the prospects of economic integration for refugees (UNHCR, 2024; De Vroome and Van Tubergen, 2010). On the other hand, negative perceptions, such as viewing refugees as economic threats, are often associated with a (largely false) view of interacting with FDPs as a zero-sum game in competition for jobs, land, and social services, significantly hindering their economic integration (Şeker, 2023). These negative perceptions can escalate social tensions and disrupt important commercial relationships between refugees and hosts; in turn this affects refugees' (and ultimately hosts') socioeconomic outcomes (Betts et al., 2024, 2014). Data on hosts' attitudes towards Venezuelans in Ecuador, Chile, Colombia, and Peru indicate that pro-migrant sentiment is more likely to be found in younger and older populations (those poised to enter or leave the labor market) and in urban areas, while middle-aged groups and rural populations are likely to have negative attitudes towards displaced and migrant Venezuelans in all four countries (World Bank, 2023).

The economic resilience of the host community influences how well both refugees and hosts cope with external shocks, such as economic downturns or environmental crises. Refugees in more economically stable areas are more likely to establish livelihoods and contribute to the local economy, creating a cycle of mutual benefit. Therefore, policies aimed at improving refugee welfare must also address the broader development needs of host communities, acknowledging the interdependence of both groups' well-being (Vemuru et al., 2020; Betts et al., 2022; Walelign et al., 2022).

Without adequate data, the persistent welfare gaps experienced by forcibly displaced populations remain poorly understood and inadequately addressed. Emerging evidence points to large disparities in poverty, labor market outcomes, and other welfare metrics between displaced and host populations. Representative microdata can facilitate the design of more effective and inclusive policies that promote the welfare of all groups.

National Statistical Offices (NSOs) can play a pivotal role in harvesting and harnessing data on displaced populations to promote economic and social benefits for all. Wherever possible, data collection efforts should engage with official national data systems to regularly and systematically generate insightful data. This can improve trust in the data and the sustainability of the data, as well as the uptake and credibility of the associated findings. The next section outlines how the World Bank and other partners can work with NSOs and governments to institutionalize the statistical inclusion of forcibly displaced persons.


Engaging
with data ecosystems

CHAPTER 1.3

Engaging with data ecosystems

Statistical inclusion is foundational for addressing FDP data and welfare gaps. Displaced individuals should be systematically integrated into national data collection and analysis. NSOs can lead the charge by collecting comparable data on both the general and FDP populations. Generating comparable data between displaced populations and the general population allows timely reporting and targeted programming on the challenges and opportunities FDPs face. Ideally, data on displaced populations are collected alongside and with the same instruments as data for the general population, preferably by NSOs as part of their regular efforts.[21]

This section makes the case for statistical inclusion against a backdrop of broader international statistical initiatives. It outlines a set of technical, financial, and political challenges often encountered when moving to integrate displaced populations in a country's broader statistical endeavors, and it presents strategies and resources to work through them. These lessons are rooted in the editors' experience and illustrated with examples from the nine cases in Part II.

Working with NSOs for better data and better policies

NSOs send a powerful signal about who counts and who is counted in shaping national priorities. NSOs which successfully include marginalized groups, such as FDPs, in statistical systems can pave the way for more effective and efficient policies to promote economic inclusion and social integration of displaced populations. As the authoritative producers of official statistics, NSOs are uniquely positioned to ensure that data systems reflect the full diversity of a country's population. Their leadership in data collection, analysis, and dissemination directly informs national development strategies, budget allocations, and program design. Moreover, international partners, including the World Bank, are more likely to use credible nationally owned data to inform their programming.

Integrating refugees into national statistical systems benefits NSOs and the countries they serve. One of the most immediate advantages is improvement in policy design. When FDPs are included in household surveys and other official data sources, governments gain a clearer picture of the needs and conditions of all residents. This enables

21 Of course, it may not always be possible to integrate data collection on FDPs into government structures and strategies. This does not preclude the collection of high-quality data that can be useful for humanitarian and development partner programming. One excellent example is the Cox's Bazar Panel Survey–a comprehensive, representative panel of Rohingya displaced in Bangladesh following the 2017 mass displacement events in Myanmar starting in August 2017 (See briefs and data from the first and intermediate rounds here, and data from the second round here.)
Even so, for the reasons outlined in this section, we assert that inclusion of FDPs in national statistical frameworks should be pursued whenever practicable.

more precise targeting of social protection programs, education initiatives, and employment strategies, for example. Knowing where displaced groups live, what services they access, and what barriers they face allows policymakers to design interventions that are both equitable and efficient in ways that can leverage the human capital and productive assets of FDPs to increase economic growth.

Countries that collect data on refugees are better placed for "burden sharing" of costs. As its second "durable solution" the Global Compact on Refugees calls for the integration of refugees into host countries where they have fled. Simultaneously, it also calls for "burden sharing" by nonhost countries involving transfers to help with the cost of hosting. Collecting good data on refugees allows for targeted policies to maximize the benefits of hosting. It also allows for the cost of integration policies to be estimated, quantifying the burden to be shared (World Bank and UNHCR 2024; World Bank 2021b).

Countries that have taken steps toward statistical inclusion have become global champions of evidence-based policies. Kenya, Colombia, and Iraq are notable examples. In Kenya, the inclusion of refugees in national household surveys has informed legislative reforms and integration programs. Colombia has committed to integrating Venezuelan migrants to benefit from an expanded, educated labor force. This is exemplified by a high-frequency panel survey on Venezuelan migrants, developed in partnership with its national statistics office. It has become a model for other countries. Iraq's efforts to align humanitarian and national data systems have facilitated the transition of internally displaced persons into national social protection programs. These examples of statistical inclusion not only improve data quality and policy outcomes but also position NSOs as leaders in advancing inclusive, evidence-based development.

The role of the Expert Group on Refugee, IDP and Statelessness Statistics (EGRISS)

Existing global standards and international agreements can help NSOs incorporate FDPs into national data systems. The UN Statistical Commission (UNSC) established EGRISS to support countries and organizations in this objective. EGRISS is a diverse, multi-stakeholder group – drawn from 60 national statistical offices worldwide and 37 regional and international organizations – to create international guidelines, standards, and recommendations to improve statistics on forced displacement and statelessness. Since its founding in 2016, EGRISS has made substantial progress in helping countries and regional and international organizations to improve their collection, production, and sharing of official data on forcibly displaced populations. Building on this progress, its mandate was broadened in 2021 to cover statelessness. In its initial phase, EGRISS developed the International Recommendations on Refugee Statistics (IRRS) and the Technical Report on Statistics of Internally Displaced Persons, both formally adopted by the UNSC during its 49th session in 2018. Following this, EGRISS entered its second phase, producing the International Recommendations on IDP Statistics (IRIS) and an online Compilers' Manual, which offers practical guidance for applying these recommendations on refugee and IDP data (Table 3).

Countries and organizations can assess and adapt current statistical systems and methodologies to the specific characteristics and needs of displaced populations. By leveraging the standards and recommendations of the UN Statistical Commission's Expert Group on Refugee, IDP, and Statelessness Statistics (EGRISS)[22] described in the next section, NSOs not only improve the quality and comparability of their data but also demonstrate their commitment to the Sustainable Development Goals (SDGs), particularly the pledge to "leave no one behind." This alignment enhances the credibility of national statistics and ensures that data on refugees can be used in global monitoring and reporting frameworks.

Technical support for NSOs to integrate FDPs is available. EGRISS and the JDC have developed online learning modules[23] and offer further support for NSOs working to integrate displaced populations into official statistics. Recent work in Djibouti showcased in Part II demonstrates how the World Bank and EGRISS worked with the NSO to build capacity to include and identify displaced and undocumented populations into their census and next household budget survey.

22 See https://egrisstats.org/recommendations/
23 For example, see https://egrisstats.org/activities/e-learning/

TABLE 3: List of key publications by EGRISS on the standards and definitions of refugees and IDP

Year of data collection	Title
The International Recommendations on Refugee Statistics (IRRS)[a]	IRRS offers a framework of guidelines for countries and international organizations to enhance the gathering, organizing, disaggregation, reporting, and overall quality of statistics on populations forcibly displaced across borders. These recommendations aim to support the improvement of national data on the stocks, flows, and characteristics of refugee and refugee-related populations, as well as to promote international comparability of these statistics.
The International Recommendations on Internally Displaced Persons Statistics (IRIS)[b]	IRIS establishes a globally recognized framework for countries and international organizations to enhance the production, coordination, and dissemination of reliable official statistics on internally displaced persons. These recommendations aim to ensure that the data are consistent over time and comparable across regions and countries.
The EGRISS Compilers' Manual (CM)[c]	The Compilers' Manual serves as a practical guide for countries and organizations implementing the International Recommendations on Refugee and Internally Displaced Persons Statistics. This manual provides detailed instructions and tools to assist in compiling, analyzing, and disseminating high-quality statistics on refugee and displaced populations, ensuring consistency and comparability across regions and countries.
EGRISS Methodological Paper 1, "Towards a Standardized Approach to Identify IDPs, Refugees and Related Populations in Household Surveys"[d]	This short methodological paper aims to operationalize the IRRS and IRIS frameworks. It describes those statistical frameworks for IDPs and refugees and the data elements required for EGRISS-compliant identification and provides a short battery of questions that can be implemented in household surveys.

Notes: All these publications are available through the EGRISS website: https://egrisstats.org/
a. https://egrisstats.org/recommendations/international-recommendations-on-refugee-statistics-irrs/
b. https://egrisstats.org/recommendations/international-recommendations-on-idp-statistics-iris/
c. https://egrisstats.org/activities/compilers-manual/
d. https://egrisstats.org/wp-content/uploads/EGRISS-Methodological-Paper-Towards-a-standardized-approach-to-identify-IDPs-refugees-1.pdf

TABLE 4: Pathways towards statistical inclusion

Component	Description	Significance	Case studies
Timely data for Addressing Immediate Humanitarian Crises	Collection and analysis of data specific to health, shelter, food, and other immediate needs of FDPS during crises.	Timely and granular data enable effective resource allocation and response to crises, saving lives and minimizing suffering.	Yemen (Chapter 2.9)
Identification and counting	Clear definitions and typologies of FDPs are essential to distinguish between refugees, asylum-seekers, internally displaced persons (IDPs), and stateless individuals.	Accurate identification promotes appropriate policies and social and legal protection for different groups.	Djibouti (Chapter 2.2)
Inclusion into National Statistical Systems	Working with National Statistics Offices to integrate data into regular operations	Sorting out technical, financial and political constraints for a more systematic and sustainable data collection of FDP data. Harmonizing data collection across sectors and aligning efforts with national and international standards.	Iraq (Chapter 2.4) Kenya (Chapter 2.7) Colombia (Chapter 2.1)

EGRISS standards should also be applied to non-NSO surveys. While the ideal is to integrate data on displaced populations into national statistical systems, this is not always feasible—particularly when data are urgently needed to inform immediate humanitarian response or when political economy reasons inhibit integration. In practice, data efforts fall along a continuum, reflecting varying levels of survey integration and data use by NSOs. This continuum represents progressive steps toward full statistical inclusion. Table 4 illustrates how the country cases presented in Part II align with different points along this continuum, depending on their objectives, constraints, and levels of system integration.

Overcoming financial, political, and technical barriers for statistical inclusion of FDPs

NSOs face financial, political, and technical barriers to the inclusion of FDPs in national statistical systems which must be acknowledged, addressed, and overcome. By proactively addressing these concerns, NSOs can move towards a more inclusive and resilient data ecosystem—one that reflects the realities of all people within their borders.

Concern 1. Financial constraints

Financial constraints significantly limit the inclusion of FDPs in national statistical systems. Collecting comprehensive data on displaced populations—often dispersed across multiple locations or residing in remote and insecure areas—is resource-intensive, requiring sustained funding for training enumerators, maintaining robust sampling frames and ensuring the quality of data collection. Ideally, countries would employ longitudinal surveys to regularly collect data. However, many governments, particularly those facing displacement crises, frequently lack sufficient budgetary allocations and institutional capacities to independently support such extensive and costly data collection exercises. This situation often results in incomplete or infrequent data, hindering effective policy formulation and implementation.

Development partners play a vital role in plugging financial gaps and fostering collaboration to enhance the efficiency and impact of data collection. Through targeted technical and financial support, they can help countries integrate refugees and IDPs into routine national surveys, promoting sustained, policy-relevant data generation. In Kenya, for example, a partnership between the World Bank, UNHCR, and the Center for Effective Global Action (CEGA) enabled the design and implementation of panel surveys that incorporated refugees into national data systems (Zikhali et al., 2024). In Iraq, coordinated efforts among international financial institutions, UN agencies, and government ministries addressed financial and technical barriers, allowing the transition from humanitarian cash assistance to national social protection programs, supported by improved data collection and targeting methods (Sarma, 2023).

NSOs can also consider phased approaches or pilot modules. This includes adding a refugee identifier to existing surveys as a cost-effective entry point. In instances where a large sample is planned in countries with a sufficiently high density of displaced households, a dedicated FDP sample may not be necessary—simply including an EGRISS identification module in the questionnaire can suffice, as with the 2023 DHS in Uganda.

Concern 2. Political commitment

Political commitment is essential for integrating FDPs into national statistical systems (World Bank 2021a, 2023a). Government support ensures meaningful inclusion, leading to better resource allocation, inter-agency cooperation, and sustainable data collection, ultimately translating into actionable policies and long-term solutions. Moreover, strong political backing fosters transparency and collaboration among humanitarian organizations, statistical agencies, and host communities. Ultimately, sustained political will is critical to translating data into actionable policies and long-term solutions for displaced populations.

Part II shows how collaboration with national governments has proved key to successfully integrating FDPs data into broader statistical systems. In Colombia, the partnership between the national statistics office, the Departamento Administrativo Nacional de Estadística (DANE), the World Bank, UNHCR, and other stakeholders led to the "Pulso de la Migración," a high-frequency

panel survey that became a key tool for shaping migration policies, including the CONPES 4100—a ten-year strategy for migrant integration. Kenya plans to include refugees in the Kenya Integrated Household Budget Survey (KIHBS), a crucial step toward their formal recognition in national statistics. In Iraq, joint efforts between the Ministry of Labor and Social Affairs, Non-Governmental Organizations (NGOs), and international organizations helped align humanitarian cash assistance programs with the national social protection system, despite challenges related to security risks and institutional trust. These cases illustrate how data-driven insights have informed policy changes: in Colombia, survey findings guided national migration policies; in Iraq, data helped channel IDPs into government safety nets and in Kenya, panel data influenced legislation such as the Refugee Act 2021. These efforts faced challenges, including security risks, survey continuity, and methodological differences among stakeholders. Nonetheless, strong government collaboration and political commitment were crucial for ensuring data sustainability, policy relevance, and improved outcomes for FDPs.

The inclusion of refugees in national statistics is about better understanding challenges and opportunities, rather than conferring legal rights or benefits. Some governments may be hesitant to include refugees in national statistics due to political sensitivities around legal status, entitlements, or public perception. It is crucial to emphasize that statistical inclusion is not about conferring legal rights or benefits. It is about understanding population needs to inform improved planning and service delivery to enhance the welfare of both displaced and host populations. Evidence suggests that inclusion can improve host-refugee relations. In countries like Niger and Ethiopia, integrating FDPs into national surveys has helped dispel myths, foster social cohesion, and support more inclusive development strategies.

Concern 3. Technical complexities[24]

Although having technical and political support can pave the way for statistical inclusion, technical considerations are often not trivial. While technical issues are often most efficiently resolved when integrating with an existing data collection effort, data collection on displaced populations may present specific technical challenges in some circumstances.

Collecting data on FDPs through standard NSO activities is the most efficient approach, where possible. Countries that have successfully integrated FDPs into broader national household surveys or developed their own longitudinal FDP surveys have typically done so on the back of relatively strong statistical systems, with the institutional capacity, infrastructure, and coordination mechanisms needed to adapt existing instruments and sampling frames (see Box 2 for discussion on how different innovative approaches have been explored to address some of these issues).

Colombia's *Pulso de Migración* is an excellent example of leveraging existing data systems. Colombia ranks 4th out of 126 low- and middle-income countries on the World Bank's Statistical Performance Index (SPI)[25], reflecting its strong legal frameworks, regular census and survey implementation, and adherence to international standards. This high capacity has enabled the national statistics office (DANE) to incorporate displacement-specific questions into routine household surveys and to launch dedicated efforts, such as *Pulso de Migración*, to monitor the socioeconomic conditions of displaced Venezuelans and internally displaced persons (IDPs). Colombia's statistical infrastructure supports timely data collection, quality assurance, and dissemination, allowing for granular tracking of labor market participation, income, and welfare outcomes. However, even with this capacity, challenges remain in capturing detailed displacement histories, aid dependency, and the

24 Financial constraints and political economy considerations are critical in extending data collection to displaced populations, however, this section focuses extensively on the technical challenges involved in this endeavor, including sampling, modality, questionnaire design, and analysis. These technical topics are dealt with in further detail elsewhere (See, for example, Yoshida and Yoshimura, *forthcoming*, for application to displaced populations); here we give an overview of the challenges and options to address them.

25 Based on the SPI scores in 2023 (https://datanalytics.worldbank.org/SPI/). The Statistical Performance Indicators measure the capacity and maturity of national statistical systems by assessing the use of data, the quality of services, the coverage of topics, the sources of information, and the infrastructure and availability of resources. See more details in https://www.worldbank.org/en/programs/statistical-performance-indicators.

mobility of FDPs—gaps that highlight the need for tailored survey modules and innovative collection methods. The Colombian case illustrates how strong statistical systems make regular FDP data collection feasible, and why lower-SPI countries face greater hurdles in integrating displacement into national data systems. Even so, data collection in Colombia could be even more efficient were refugee and IDP identification modules to be included in the country's large-scale household surveys.

In more constrained contexts, however, data-generating capacities are often limited. While long-settled FDP populations in stable, non-conflict areas may already be known to governments or partners such as UNHCR – making sampling frames readily available – recently displaced populations or those in conflict-affected, insecure areas remain far harder to reach. Here, data collection can be hindered by insecurity, limited access, and the mobility of displaced groups, resulting in persistent data gaps. Refugees and displaced people in these settings may be in remote or dangerous regions where access requires significant logistical effort, or they may move unpredictably due to conflict dynamics, seasonal changes, or shifting security conditions. These factors complicate the establishment of reliable sampling frames and make longitudinal tracking especially difficult. That limits the ability to measure displacement's long-term impacts and the welfare trajectories of those affected. Furthermore, respondents may also come from different ethnic groups or speak different languages than the broader population. As with any survey group, trust, interview consent and data quality are likely to increase when the questionnaire is in the respondent's language and enumerators are from the respondent's ethnic group. These considerations may increase costs.

BOX 2: Innovative approaches to fill data gaps on FDP

New guidelines on sampling by the World Bank's Poverty and Equity Global Practice give useful direction that can be applied for challenges that may be encountered when designing surveys for displaced populations.

Sampling supplemented by geographic data. When census EAs are missing, outdated, or not shareable, teams can delineate EA-sized segments directly from high-resolution satellite/drone imagery and OpenStreetMap (OSM) building footprints, then list and sample. In the Cox's Bazar example, mauzas were stratified by exposure (based on OSM travel time), segmented to ~100 households per segment, validated against imagery, and then ground-truthed; manual boundary edits were applied where automated grids conflicted with natural features. Resulting designs use three-stage (or more) sampling/weighting when segmentation adds stages.

Using administrative registries. UNHCR's proGres is valuable but lists "cases", not households, so unit reconciliation is required. When adopting proGres (or other registries) as the basis of a sampling frame, users should first verify the household "around" each sampled case, then de-duplicate multiple cases belonging to the same household; and finally adjust selection probabilities by the number of cases per household. Alternatively, a sample may systematically select individuals from the registry when interviewing at offices/centers, with cautions about possible double-counting and limits to household verification.

Phone sampling when no frame exists. Where census frames or registries are unavailable, Random Digit Dialing (RDD) can be used, recognizing that RDD samples individuals with phones and may exclude non-owners. The guideline recommends reweighting phone samples against a representative reference survey—first via propensity-score weighting, then max-entropy/raking—to reduce coverage and nonresponse bias and align key margins.

Mode and instrument choices. For frequent, lower-cost data collection in fragile settings, the note discusses phone, decentralized, and office-based approaches, alongside traditional fieldwork, and emphasizes choosing modes considering security and resilience trade-offs. To keep instruments short while still estimating complex indicators (e.g., poverty/expenditure), the guideline highlights Survey-to-Survey (S2S) imputation—especially SWIFT, which uses 10–15 short questions and has shown accuracy comparable to full surveys in many applications.

Source: Guidelines for Design of Frequent Data Collections for Forcibly Displaced Populations by Yoshida and Yoshimura (forthcoming).

Challenges for identification: EGRISS standards and migration histories

The journey toward full statistical inclusion begins with establishing clear definitions and typologies for FDPs. Differentiating between refugees, asylum-seekers, IDPs and stateless individuals from other population groups, including economic migrants, is essential for ensuring accurate identification. This foundational step allows policymakers, humanitarian agencies, and national statistical offices to develop targeted data collection methodologies that reflect the specific circumstances of each group. Without this clarity, misclassification or omission of key populations can undermine the effectiveness of policies and aid distribution.

When designing socioeconomic surveys for displaced populations, the key difference from standard questionnaires is adding a brief set of identification questions. Definitions of terms like "refugee," "IDP," and "asylum seeker" vary across countries and organizations, complicating data standardization and cross-border comparisons. For instance, an asylum seeker who is categorized as a refugee in one country might be considered a migrant in another, depending on the criteria, such as the cause of displacement or the duration of stay. This inconsistency complicates efforts to create a standardized global dataset, leading to challenges in cross-border data comparison and international policy making. Even within the same country, different agencies might apply different criteria or methodologies, leading to fragmented data that is hard to aggregate or compare.

EGRISS has produced guiding principles that define which conditions should hold for a person identified in the data as a refugee or an IDP (see Appendix Table A-1). IRRS and IRIS do not offer practical solutions to properly identify these displaced people through a survey standardized questionnaire. The EGRISS (2023) methodological paper fills these gaps by providing a battery of six questions for IDPs and 9 questions for refugees that should be added to any survey on these populations (see Appendix Table A - 2).

Developing clear typologies for migrants, refugees, citizens, and others in the country is crucial to be able to address data gaps. The case study of Djibouti (Chapter 2.2) underscores how developing proper typologies to capture different types of migrants is essential as the first step towards addressing data gaps. Djibouti's strategic location at a migration crossroads in the Horn of Africa has resulted in a diverse mix of migrant populations, including refugees fleeing conflict and economic migrants seeking better opportunities. However, estimates of the migrant and undocumented population vary widely. A qualitative survey using focus group discussions and interviews highlighted the need for a clear typology to improve data collection. The analysis identified four key groups: recent economic migrants, refugees and asylum seekers, Long-Term Undocumented Residents (LTURs), and Djiboutian nationals. These categories, while useful, are not always distinct, as individuals may move between statuses due to changing circumstances, such as losing refugee documentation.

The lack of a standardized definition of "host" populations can give rise to further sampling challenges. In some contexts, host populations are defined nationally as non-displaced individuals, while in others—such as Ethiopia, Kenya, and Niger—they are defined geographically as communities located near camps or in areas with high concentrations of displaced persons.

Sampling challenges to obtain representative information

Developing a valid sampling frame to derive representative data on FDPs poses unique and complex challenges. These populations are often located in conflict-affected or insecure areas where data collection is logistically difficult, costly, or restricted. And although most of the stock of displaced populations has been in their location for years, the flow of the newly displaced—driven by conflict, seasonal variation, or shifting security conditions—may be unpredictable and thereby complicate efforts to construct reliable frames or conduct longitudinal tracking, which is crucial for understanding the long-term impacts of displacement. The growing number of FDPs living in urban areas (Brown et al. 2024; World Bank–UNHCR Joint Data Center on Forced Displacement, 2022) adds further complications. Informality, overcrowding, and anonymity result in displaced and nondisplaced households becoming enmeshed in these areas. This also makes it difficult

TABLE 5: Country cases' sampling frames and survey modalities

Country Case	Sampling Frame(s)	Modality
Central African Republic (2021 EHCVM)	UNHCR registry (IDP camps)	In-person
Colombia (Pulso de la Migración)	Subsample of nationally representative ENAHO survey	Phone
Djibouti	Purposive (non-representative) sample, neighborhoods with large poor and undocumented populations selected by WB and National Institute of Statistics	In-person Focus Groups
Ethiopia (SESRE 2023)	UNHCR registry	In-person
Iraq (Rapid Welfare Monitoring Survey 2017)	The 2009 census of dwellings	In-person
Jordan (VAF 2021)	UNHCR registry	In-person
Kenya (The Kalobeyei Socioeconomic Survey (2018), Kakuma Socioeconomic Survey (2018), Urban Socioeconomic Survey (2019))	UNHCR registry	In-person
Niger (EHCVM 2018/19)	UNHCR registry	In-person
Yemen	WFP registry Phone survey sub-sample Internet users with a Yemen IP address who encounter dormant domains	In-person qualitative interviews Phone Internet

Sources: Authors' compilation.

to identify displaced individuals and distinguish them from other vulnerable urban populations—which again emphasizes the importance of including an identification module in the survey for all respondents.

Innovative approaches have emerged to help generate sampling frames for representative surveys. Administrative lists, such as UNHCR's case management system proGres, have proved useful in complementing census and other official sampling frames. In practice, mixed sampling strategies are often required. For instance, in camp settings, registration data may offer a useful sampling frame, whereas in urban areas, oversampling in gridded zones with high concentrations of displaced people may be more effective. Yet even in camps, area-based frames are still the preferred approach for UNHCR's new flagship survey program, the Forced Displacement Survey (FDS). Other examples combine a variety of frames, geospatial data, and lists to derive representative samples[26]. Some case studies in this volume also rely on non-traditional methods—such as phone bank data in Ecuador or internet users in Yemen—which can be useful for rapid data collection, though additional attention may be required to carefully reweight the samples to be representative. Table 5 summarizes the frame used in the country chapters.

Given the challenges generating representative samples, transparent documentation is essential to ensure data are interpreted correctly. More effort is needed to clearly communicate the levels of representativeness, definitions used, and limitations of datasets covering FDPs. The case studies in Part II highlight the importance of specifying the timeframe or migration period covered, identifying any excluded groups or geographic areas (e.g., due to cost constraints, as in parts of Ethiopia or Colombia), and clearly explaining sampling design limitations. Given the inherent difficulties and costs of surveying

26 See for example World Bank 2023b and Endara et al., 2024.

displaced populations, exclusions may sometimes be necessary—but they must be transparently disclosed. To minimize bias in comparisons between displaced and host populations, sampling approaches should be aligned as much as possible, including harmonized sampling stages, enumeration areas, and weighting schemes.

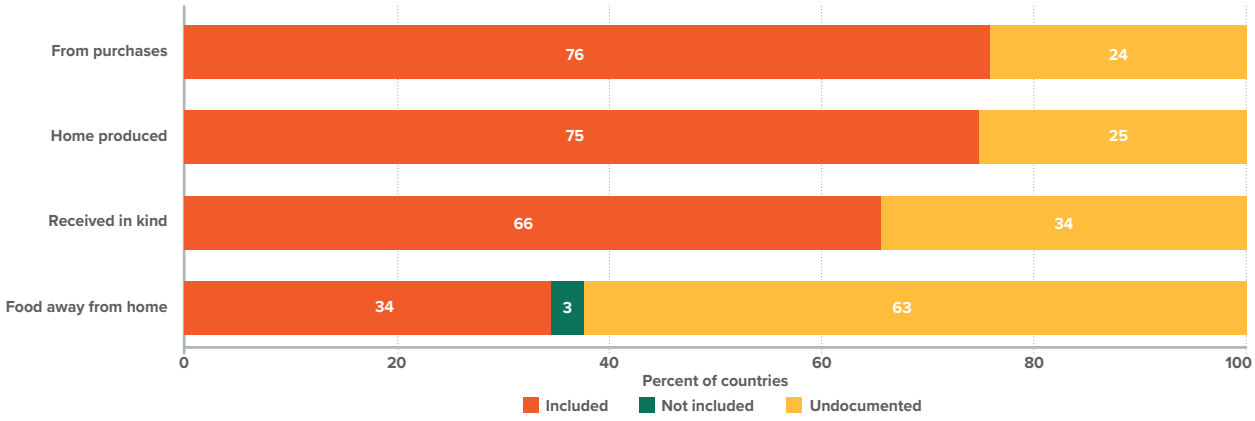
Estimating welfare for displaced populations living in camps

Understanding the welfare of displaced populations is often best done with data that allows comparison across groups. These comparator groups can be within a context (camps, urban areas), within a country and across countries, or against international benchmarks. However, for some dimensions challenges may arise due to the different nature of in-camp living conditions, the heavy reliance on humanitarian aid, and the absence of certain markets. This can make direct comparisons hard to interpret.

Conventional monetary poverty metrics—typically based on household income or consumption—are ill-suited to camp settings. In camps, refugees often depend on in-kind aid and have limited engagement with formal markets. Camp refugees often rely on in-kind assistance—such as food, water, shelter, and healthcare—rather than purchasing these goods directly, complicating efforts to measure poverty using standard income or expenditure data. Much of their consumption comes from distributions or vouchers that do not translate neatly into cash values and attempts to assign monetary equivalents—typically using local market prices—can result in inconsistencies, especially when camp prices differ from surrounding areas. This issue is reflected in global practices: while most countries include food from purchases (76%) and home production (75%) in consumption aggregates used for poverty measurement, 66 percent exclude food received in kind (Figure 6). This omission is especially problematic for refugee populations who depend heavily on such assistance, leading to underestimation of their consumption and misrepresentation of their true welfare and poverty levels. Furthermore, 63 percent of countries exclude food consumed away from home, underscoring broader gaps in capturing the full scope of consumption. Addressing these exclusions is essential for accurately assessing the living standards of displaced and other marginalized populations.

Refugee and IDP camps often operate with restricted markets, which can distort local prices for goods and services. Limited competition and access to external supply chains mean that prices within camps may not reflect those in broader national markets. Additionally, the "cost of basic needs" poverty line, which includes items such as housing and utilities, is difficult to estimate accurately

FIGURE 6: Constructing comparable food consumption aggregates: percentage of countries that include or exclude each food source



Note: The graph shows the distribution of countries (in percent) for which the consumption aggregate underlying official poverty estimates includes or excludes each component (food prepared away from home is considered as a stand-alone category here, because it is often the subject of a dedicated question or module in household expenditure surveys).
Source: Mancini and Vecchi (2022).

BOX 3: Practical solutions are emerging to estimate poverty for in-camp refugees

Customized consumption modules. In Jordan, for instance, the Vulnerability Assessment Framework (VAF) survey included a tailored consumption module that reflected the types of goods and services common to refugee households. This module was designed to balance the need for detailed consumption information with the practical limitations of camp settings. By including categories that align with the consumption patterns within camps (such as non-cash benefits for food, housing, and utilities), these customized modules offer a more realistic picture of refugee welfare levels and help align with the "cost of basic needs" approach used in broader poverty measurements (Obi 2023).

Valuation of in-kind aid and adjusted poverty lines. Researchers have developed methods to adjust poverty lines based on the valuation of in-kind aid. For example, in the Jordanian context, analysts calculated poverty levels by assigning estimated market values to shelter, water, and electricity provided in camps. This approach led to a modified poverty threshold that accounts for in-kind support, which provided a more accurate comparison between camp and out-of-camp refugees. Such adjustments, although complex, allow for a fairer poverty estimate by reflecting the real consumption value derived from these free or subsidized services.

in a camp setting, as these are typically provided free of charge or at reduced rates. For example, a camp resident's shelter cost might be zero, whereas a similar household outside the camp may incur a regular rental expense.

Displaced people in camps may display consumption patterns that differ from those in host communities. For instance, camp residents may rely on communal resources, such as shared kitchens or water points, affecting their personal consumption profiles. These shared resources are difficult to quantify within a standard consumption aggregate. Box 3 summarizes some emerging solutions to estimate poverty for in-camp refugees. To the degree that any displaced person, regardless of camp status, is eligible for in-kind benefits, these challenges may also confound poverty estimates for FDPs living outside of camps as well.

Because monetary measures may not fully capture refugees' living standards, multi-dimensional poverty indices (MPIs) have been used to include non-monetary welfare indicators. These indices consider factors like educational access, health, and physical security, which are highly relevant in camp settings. By adopting non-monetary MPI frameworks, researchers can create a more holistic poverty profile that reflects refugees' quality of life beyond just income or consumption. Different contexts have reported different relative welfare of hosts, camped, and non-camped populations for different welfare measures.

The need to cover information on vulnerabilities and capabilities

Beyond monetary and non-monetary measures of welfare, it is essential to compare aspects related to protection risks, economic inclusion and capabilities. In Jordan, adding indicators such as freedom of movement and job opportunities was key to explaining why many refugees prefer to live outside camps despite higher poverty rates there. This approach acknowledges the importance of autonomy and access to opportunities, which are often restricted within camps (Chapter 2.5). Furthermore, there is emerging evidence exploring the well-established benefits of work on mental health to those who are experiencing forced displacement (Hussam et al., 2022).

Survey instruments can include modules related to "durable solutions" and assessments of vulnerabilities and capabilities. These approaches go beyond standard household budget questions to include measures and protection risks specific to displaced populations. The 2010 Inter-Agency Standing Committee (IASC) Framework on Durable Solutions for Internally Displaced Persons notes that "a durable solution is achieved when IDPs no longer have specific assistance and protection needs that are linked to their displacement and such persons can enjoy their human rights without discrimination resulting from their displacement."[27] At present, the framework of "durable solutions" has been largely conceptualized as a tool to be applied to IDPs, but

27 https://inform-durablesolutions-idp.org/wp-content/uploads/2018/03/IASC-Framework-Durable-Solutions-IDPs-EN.pdf

this approach can also be gainfully applied to other groups of FDPs.[28]

The Joint IDP Profiling Service (JIPS) has developed a comprehensive guide that outlines key indicators aligned with the IASC Framework on Durable Solutions for Internally Displaced Persons. This guide organizes indicators across eight broad domains essential for assessing progress toward durable solutions. These domains include: (1) Long-term safety, security, and freedom of movement. (2) Standard of living, encompassing food security, water, housing, healthcare, and basic nutrition. (3) Access to employment and livelihoods. (4) Access to mechanisms for compensation or the restoration of property lost due to displacement. (5) Replacement of personal documentation. (6) Reunification of family members separated during displacement. (7) Participation in public affairs on an equal basis with the resident population. (8) Access to justice and reparations for displacement-related violations. This framework provides a structured foundation for assessing and monitoring the complex, multi-dimensional nature of durable solutions for IDPs.

This IASC framework may be usefully applied to refugees, though refugee-specific approaches to measure durable solutions have not yet been broadly established.[29] For IDPs and refugees the three durable solutions routes are conceptually quite similar: return (reintegration at the place of origin), local integration into the community where they currently reside, or resettlement to a place elsewhere in the country (for IDPs) or to another country (for refugees). Of these three routes for durable solutions, the one with the most apparent overlap between refugees and IDPs is local integration. However, because IDPs are citizens and refugees are not, local integration and resettlement present distinct challenges in the case of IDPs: issues of restoration, participation in public affairs, and justice, for instance, will necessarily be quite different for refugees compared to IDPs.

Durable solutions represent an area that has been under-explored. So far as we are aware, there is no dataset with a representative sample of a displaced population that covers all eight domains of durable solutions. Many datasets, including those used in the cases in this volume, contain elements of these domains, such as standard of living and livelihoods, though they are typically not discussed within the context of the IASC framework.

Finally, there are some aspects of welfare that go beyond the standard of living and livelihoods dimensions of the durable solutions framework, but they are nevertheless highly relevant for displaced populations. These include challenges individuals may have faced en route, like losing a family member, being extorted for passage, or suffering sexual or other physical violence. There may also be challenges in their new place of refuge, like the ability to use professional accreditation; mental health challenges arising from past trauma and loss and their current situation; the cognitive effects of toxic stress and food insecurity, particularly in early childhood; or plans for remaining in the displaced environment or returning to their homes. Non-monetary aspects of welfare might further consider subjective wellbeing, resilience, and self-reliance.

The importance of surveying FDPs across time

The EGRISS identification modules' migration histories may need to be expanded in some cases. The migration history in the core EGRISS identification module is limited to the location of a person's last domicile before being forced to flee home the first time. Depending on the policy and research questions the data are intended to inform, additional survey items may need to be added, such as whether a respondent has crossed an international border, intermediate stops between their place of origin and current location, how long they have been abroad, or documents used for travel. Researchers and policymakers are often interested in understanding migration routes, multi-country stops, return migration, or professional accreditation which may be best facilitated through retrospective migration modules or panel data collection as appropriate.

By tracking the same individuals or households over extended periods, policymakers and researchers

28 The forthcoming Oxford University Press *Handbook of Internal Displacement* will have further discussion and examples of durable solutions.

29 See the Refugee Durable Solutions framework from ReDSS, for example: https://www.regionaldss.org/wp-content/uploads/2024/02/ReDSS-Solutions-Framework-guidance-manual.pdf

can gain insight into the evolving dynamics of displacement, resettlement, and integration. Retrospective and longitudinal data collection can provide important information on the past and evolving realities of forcibly displaced populations, and provide insights into migration, integration, and the impact of interventions over time. Because data are only useful insofar as they accurately represent the true population, data collection frequency is an important consideration for dynamic groups like FDPs who may be physically moving or who may be responsive to changes in policy. Similarly, repeated data collection of the same individuals over time can yield tremendous insights about changes over time. Such panel data collection is helpful for understanding long-term trends in migration and integration as long as attrition rates remain low.

Panel data can provide powerful insights. In Colombia (Chapter 2.1), the Migration Pulse (MP) survey's longitudinal structure allowed researchers to track individual changes in employment, access to services, and economic assimilation over multiple rounds. The ability to observe labor market transitions and the impact of regularization policies provided policymakers with dynamic insights that single cross-sectional surveys could not capture. The high-frequency nature of the survey ensured that policymakers could respond to emerging trends, such as fluctuations in migrants' employment rates or awareness of legal documentation programs. Even so, the MP still experienced structural challenges, such as survey attrition and the need for refresher samples to maintain representativeness.

Collecting panel data on displaced populations can be challenging. There may be logistical difficulties in consistently tracking highly mobile and vulnerable groups when they are spread across multiple locations and potentially difficult-to-access areas (Mixed Migration Centre, 2022; World Bank 2023). Security concerns may intermittently restrict access, especially in conflict-affected regions, risking the safety of both respondents and data collectors. Additionally, the transient nature of newly displaced households may inhibit maintaining contact over time, resulting in higher attrition rates[30]. Diverse objectives and varying methodologies of multiple organizations conducting surveys can further complicate standardization and comparability of data, leading to fragmented and inconsistent datasets. Moreover, the capacity requirements for longitudinal data collection are typically quite high, as is the requirement for sustained funding and institutional commitment required for panel surveys.

Filling gaps with diverse data sources and real-time monitoring

While face-to-face interviews remain the gold standard for collecting microdata, alternative methods like phone, resident enumerators, and internet surveys have also been used for monitoring displaced populations. The recommended and more reliable mode of data collection for microdata tends to be face-to-face surveys. Where in-person visits are untenable because of violence or for epidemiological reasons, or are cost prohibitive, phone surveys have been used with success even for displaced populations.[31] Variations can include decentralized data collection in which enumerators are embedded within each administrative unit, hub-based data collection in which pre-selected households are interviewed when they come to a central location (as when they are receiving services), and Internet-based surveys (See Yoshida and Yoshimura, forthcoming). While these modalities can be useful, biases in terms of representativity should be assessed carefully.[32]

The case study of Yemen (Chapter 2.9) underscores the value of harnessing diverse data sources to gauge socioeconomic realities for FDPs in data-scarce environments. In Yemen, diverse data sources—including satellite imagery, phone surveys, qualitative interviews, and internet-based surveys— played a crucial role in filling critical gaps in understanding the scale and nature of internal displacement, particularly given the constraints of conducting traditional face-to-face surveys amid conflict. Satellite imagery, such as

30 Some recent work by Fei et al (2022) has illustrated a promising technique of collecting respondents' WhatsApp IDs in addition to their phone numbers. WhatsApp has been observed to have penetration levels in many contexts, and carries the benefit of stability—that is, even if a refugee changes a phone number when they cross a border (or for other reasons), they are likely to maintain their WhatsApp ID—this may dramatically improve the potential for recontact.

31 See, for example, Tanner (2021) for a discussion on the challenges and opportunities of conducting phone surveys with displaced populations.

32 For more discussion on the pros and cons of non-face to face data collection see World Bank (2024) and references therein.

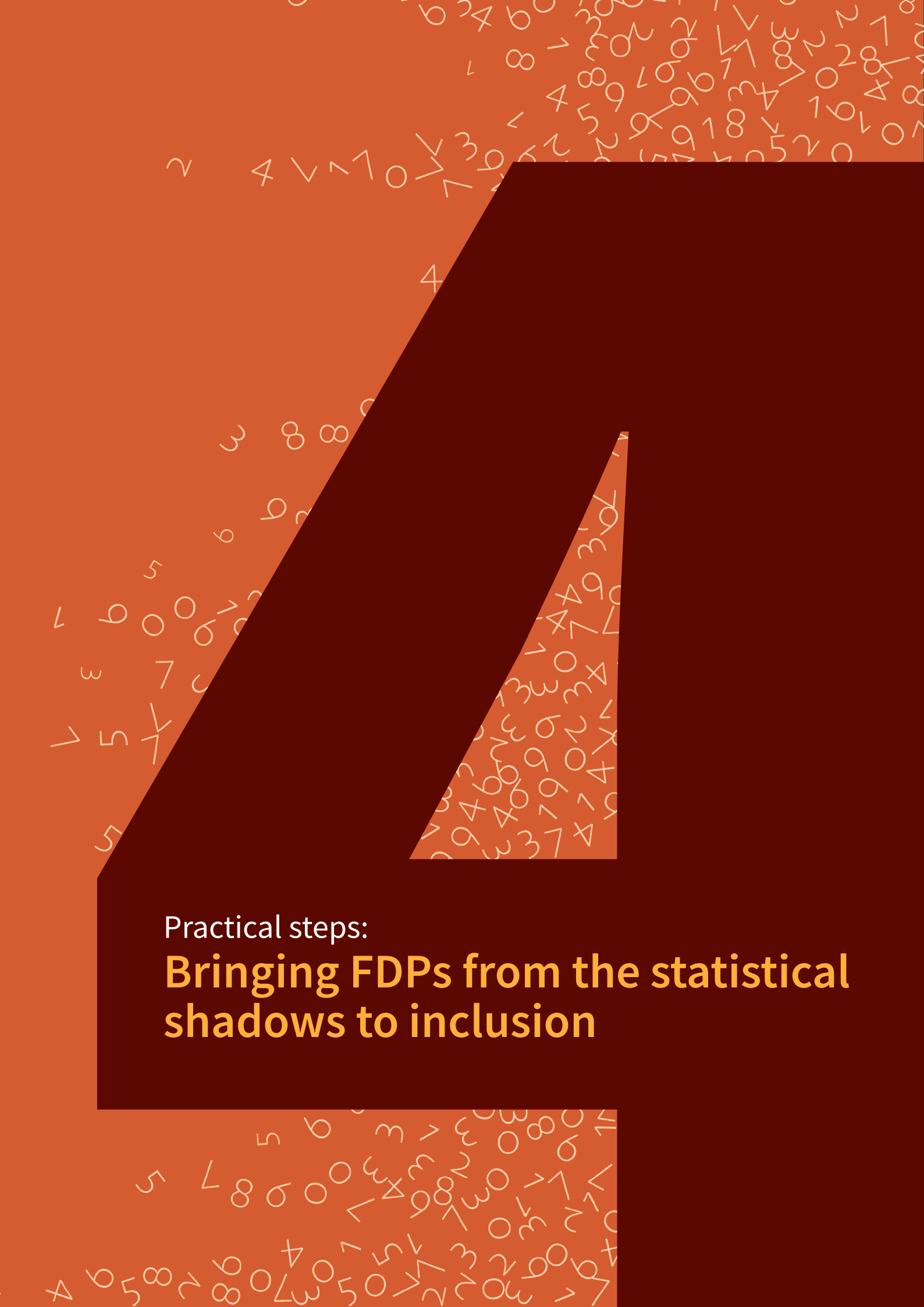
the remote monitoring of the Al Jufainah IDP camp in Marib, enabled the estimation of population growth and changes in dwelling conditions over time, providing timely and cost-effective insights that would otherwise be challenging to obtain. Phone surveys, such as those regularly conducted by the World Food Programme (WFP) and the World Bank, have captured trends in displacement and household welfare, allowing for longitudinal tracking of displaced households' experiences before, during, and after displacement. Qualitative interviews have complemented these methods by highlighting individual experiences and deeper insights into the daily realities and diverse coping strategies of displaced families. Lastly, internet-based surveys, despite limitations such as biased samples and lower accuracy in capturing displacement prevalence, have offered secure and anonymous platforms for displaced individuals to share sensitive perceptions and experiences. Together, these diverse data sources provide policymakers and humanitarian agencies with a richer, multidimensional understanding necessary to inform effective interventions and targeted policies addressing the complex needs of Yemen's displaced populations.

The integration of diverse data sources can generate valuable policy insights, enabling targeted interventions for both immediate humanitarian needs and long-term development goals. Satellite data on camp populations can guide resource allocation, while qualitative insights inform social protection programs. The study underscores the need for a balanced approach, where quantitative and qualitative methods work together to form a holistic understanding of displacement. This multidimensional strategy equips policymakers and humanitarian organizations with the tools necessary to navigate the complexities of FDP experiences, ultimately fostering more effective responses and sustainable development in conflict-affected regions like Yemen.

Recent efforts have sought to harmonize nationally representative datasets on displaced populations across countries. For example, Genoni, Krishnan, and Vishwanath (2023) harmonized face-to-face budget surveys from 10 countries[33] (including the Niger case in this volume), while Kim and Tanner (2023) harmonized phone survey data from 14 countries collected during the COVID-19 pandemic, including Djibouti. At a regional level, Mejia-Mantilla et al. (2024) standardized data on Venezuelans in the four countries with the largest expatriate populations, including the data in the Colombia case in chapter 2.1.

To facilitate cross-country comparisons, survey instrument coordination is more robust and straightforward than ex post data harmonization. The methods used to collect data—such as sampling techniques, survey design, and data processing—can vary widely between organizations, resulting in discrepancies in scope, accuracy, and reliability, complicating cross-country comparisons. For instance, one organization might rely on household surveys while another uses administrative data, leading to conflicting statistics and a fragmented data landscape. Surveys like the Demographic and Health Surveys, Living Standards Measurement Surveys, and many of the World Bank's household budget surveys strive for cross-country comparability by using consistent instruments and methods. However, even within institutions like the World Bank, the goal of harmonization is often secondary to accommodating client needs, and national statistical offices may adjust survey items or response categories to reflect local contexts. Because ex post harmonization is resource intensive and necessarily imperfect, starting survey work with standardized instruments is often the most efficient and effective approach.

33 See https://microdata.worldbank.org/index.php/catalog/6104



Practical steps:

Bringing FDPs from the statistical shadows to inclusion

CHAPTER 1.4

Practical steps: Bringing FDPs from the statistical shadows to inclusion

Missing data on the lives and livelihoods of displaced people limits opportunities to strengthen their resilience and self-reliance. Statistical inclusion of forcibly displaced populations is both a moral and practical imperative. Morally, statistical inclusion affirms the dignity and humanity of refugees and internally displaced people. Practically, it ensures that policies and programs are grounded in evidence that reflects the realities of all people within a country's borders. Without such inclusion, national development strategies risk being incomplete, inequitable, inefficient, and ultimately ineffective.

Statistical inclusion is not just a technical goal – it is a foundational principle of broad-based inclusive development. NSOs can become champions for data ecosystems that support statistical inclusion and lead to more effective, efficient, and equitable policies. NSOs can help ensure that no one is left behind in the pursuit of sustainable development by integrating displaced populations into household surveys and administrative data systems. This inclusion is critical to making the most of the productive potential of displaced people, enriching economies and societies by drawing on the talents and efforts of all individuals. This leadership role enhances the credibility and relevance of official statistics and positions NSOs as potential leaders in the transformation towards inclusive, evidence-based governance. By addressing the financial, technical and political barriers to statistical inclusion, countries can build more inclusive and resilient data ecosystems that accurately reflect the circumstances of all populations within their borders. Below, we highlight the main steps that countries can take towards statistical inclusion.[34]

Step 1: National statistical offices can build upon existing tools, partnerships, and innovations. A key starting point is the formation of a joint technical working group that brings together the NSO, relevant line ministries, and development partners, such as the World Bank, UNHCR, and the JDC. This group can serve as a platform for co-designing strategies, sharing technical expertise, and coordinating resources to ensure that FDP data are collected in a methodologically sound and policy-relevant manner.

Step 2: National statistical offices can create a coalition to mobilize resources to support statistical inclusion. NSOs can promote funding for data collection and investments in capacity building, data infrastructure, and long-term institutional development. These steps can help NSOs lead the way in building inclusive data ecosystems that reflect the realities of all people within their borders.

Step 3: National statistical offices can partner to map existing data gaps and identify opportunities to fill those gaps with data to inform a clearer and more comprehensive picture of the welfare and economy of the whole country. This includes reviewing current survey instruments, administrative data systems, and sampling frames to assess where and how FDPs can be included. Survey instruments should be consistent between host and displaced populations within a country to facilitate direct

34 Although these steps are presented in a serial framework, they need not be taken sequentially. Indeed, NSOs can take these steps in parallel and should consider engaging in easy steps first to build institutional momentum.

welfare comparisons. Ideally these instruments would include sections on access to the labor market, access to services (including financial, education, health, and social protection services), income/consumption poverty, food security, and EGRISS identification modules, as well as any other modules designed for national households, including important (if nonstandard) modules like early childhood development or gender-based violence. Modules dedicated solely to displaced populations are generally of secondary importance for national planning and they need not be extensive. As identified through the EGRISS modules, skip patterns can be integrated to follow with questions to FDPs on migration histories and intent to return, and their ability to access programming specifically designed for FDPs/migrants, like special labor market permits, as appropriate.

In contexts where sampling frames are weak or outdated, NSOs can explore the use of UNHCR registration data or other administrative sources to improve coverage. In fragile or conflict-affected settings, innovative methods such as satellite imagery, phone surveys, sophisticated internet-based sampling and surveys, and qualitative interviews can complement traditional data collection approaches.

Step 4: National statistical offices can pursue success in the short term while simultaneously making long-term investments to strengthen data systems. In the short-term NSOs can identify immediate, low-cost opportunities to promote statistical inclusion: so-called "low-hanging fruit." At the same time, they can pursue long-term investment in the development of more robust statistical systems. One of the most achievable short-term steps is to integrate FDP identification modules into upcoming national household surveys. For example, Kenya's plan to include refugee identifiers in the next Kenya Integrated Household Budget Survey (KIHBS) provides a promising model that could be replicated elsewhere. These identification modules can be designed to align with international standards, such as those developed by EGRISS, ensuring both internal coherence and cross-country comparability. Piloting EGRISS-compliant questions in household surveys is a practical, low-cost entry point that allows countries to begin identifying displaced populations using existing survey infrastructure—laying the foundation for more comprehensive integration into national data systems over time. By mapping existing data gaps, seizing immediate opportunities, such as incorporating FDP identifiers in household surveys, and mobilizing resources for longer-term investments in data systems, countries can take concrete steps toward building inclusive data ecosystems. These efforts not only improve the quality and relevance of national statistics but also lay out the groundwork for more inclusive and sustainable development, where the rights and contributions of displaced populations are fully recognized and supported.

Appendix

TABLE A.1: Conditions for refugees or IDP status

Refugees	IDP
Persons in need of international protection • *Prospective asylum seekers:* Persons with the intention of filing an application for asylum, but who have not yet done • *Asylum seekers:* Persons who have filed an application for asylum in a country other than their own and whose claims have not yet been determined • *Persons with determined protection status:* Persons who have had their protection status determined by their host country. **Persons with refugee background (GROUP 2)** • *Naturalized former refugees:* Persons that were once refugees in the host country but who no longer have refugee status because they are now naturalized citizens of the host country. • *Children born of refugee parents:* Persons that are born of one or more refugee parents, and who are not themselves in need of international protection, usually because they have citizenship of the host country • *Reunified refugee family members from abroad:* People who have joined refugee families or former refugee families from abroad through a process of family reunification. • *Others with a refugee background:* Others who have a refugee background who are not currently refugees, including those whose protection may have ceased but who remain in the country of concern. **Persons returned from abroad after seeking international protection (GROUP 3)** • *Repatriating refugees:* Persons who have returned under assisted programs or spontaneously to their home country after having enjoyed asylum abroad. • *Repatriating asylum seekers:* Persons returning after having attempted to seek asylum abroad. • *Returning from international protection abroad:* Persons who received temporary protection or were granted stay abroad and who have since returned to their home country. • *Others returning from seeking international protection abroad:* Persons who left the country to seek international protection abroad but were not covered by the other three categories above.	• Have been forced or obliged to move from their place of habitual residence by a causing event • Have been usually resident at the place where, and at the time when, a causing event occurred • Have been physically living away from the dwelling in which they were living at the time of the causing event • Be currently within the internationally recognized borders of the country

Sources: EGRISS (2023).

TABLE A.2: Sample questions for the identification of refugees and IDP in the IRIS and IRRS statistical frameworks

Number	Question	Response Categories		Statistical Framework	Data Element
Q1.	[*Have you/Has NAME*] always lived in [*survey country*]? Please do not think about short or temporary absence or travels	01. Yes 02. No 98. Don't know 99. Refused to answer	→ *End* → *End*	IRRS (Q1) IRIS (-)	MIGRATION HISTORY
Q2.	Of which country [*are you/is NAME*] a citizen?	01. [*Host country*] 02. Other country: *specify* 03. Stateless 98. Don't know 99. Refused to answer	→ *Q4* → *End* → *End* → *End*	IRRS (Q2) IRIS (-)	CITIZENSHIP
Q3.	While living in [*survey country*], [have you/has NAME] ever had to flee home?	01. Yes 02. No 98. Don't know 99. Refused to answer	→ *Q5* → *End* → *End* → *End*	IRRS (Q3a) IRIS (Q1)	FORCED TO FLEE
Q4.	While living in [*Other country*], [*have you/has NAME*] ever had to flee home?	01. Yes 02. No 98. Don't know 99. Refused to answer	→ *End* → *End* → *End*	IRRS (Q3b) IRIS (-)	FORCED TO FLEE
Q5.	What is the main reason why [*you/NAME*] had to flee home?	01. Security reasons, armed conflicts and generalized violence 02. Fear of persecution 03. Human right violation 04. Natural or man-made disaster 05. Eviction 06. Personal reasons 98. Don't know 99. Refused to answer	→ *End* → *End* → *End* → *End*	IRRS (Q4) IRIS (Q2)	FORCED TO FLEE
SKIP CHECK	*If respondent has not always lived in survey country (Q1=2), skip to question on crossing the international border (Q7), otherwise continue*				
Q6.	Tell me where you were living right before you were forced to flee home for the first time? Tell me the name of the province, the county, the district and the locality, i.e. village or town?	NUTS 1 (provincial level): NUTS 2 (county level): NUTS 3 (district level): NUTS 4 (village or town name):		IRRS (-) IRIS (Q3)	MIGRATION HISTORY
Q7.	After [*you were/NAME was*] forced to leave home, did [*you/NAME*] cross an international border?	01. Yes 02. No 98. Don't know 99. Refused to answer	→ *End* → *End*	IRRS (Q5) IRIS (Q4)	MIGRATION HISTORY
SKIP CHECK	*If respondent has always lived in survey country (Q1=1) and has not crossed an international border (Q7=2) skip to question on initial location of displacement location (Q9),* *If respondent has not always lived in survey country (Q1=2) and has not crossed an international border (Q7=2) end questionnaire, otherwise continue*				

TABLE A.2: (cont.)

Number	Question	Response Categories		Statistical Framework	Data Element
Q8a.	How long did [*you/NAME*] stay abroad? Less than 12 months or more than 12 months?	01. Less than 12 months 02. 12 months or more 98. Don't know 99. Refuse to answer	→ *End* → *End*	IRRS (Q6) IRIS (Q5a)	MIGRATION HISTORY
SKIP CHECK	*If respondent has not always lived in survey country (Q1=2) and has crossed an international border (Q7=1) skip to question on applying for international protection (Q10)* *If respondent has always lived in survey country (Q1=1) and has crossed an international border continue (Q7=1) continue*				
Q8b	What was the primary document that allowed [*you/NAME*] to stay abroad?	NO DOCUMENTS: 01. No documents VISAS: 02. Tourist visa 03. Student visa 04. Work visa 05. Humanitarian visa INTERNATIONAL AGREEMENTS: 06. Regional free movement agreement (e.g. Mercosur, EU, SADC, EAC, ECOWAS) RESIDENCY: 07. Permanent resident document PROTECTED STATUS: 08. Asylum applicant document 09. Refugee 10. Recognized stateless person document 11. Complementary and subsidiary protection 12. Temporary protection ENROLLEMENT DOCUMENT 13. Enrolment document 96. Other: specify 98. Don't know 99. Refused to answer		IRIS (Q5b)	
Q9	When [*you/NAME*] were forced to flee, where did you move first? Tell me the name of the province, the county, the district and the locality, i.e. village or town? Please do not think about short stopovers.	NUTS 1 (provincial level): NUTS 2 (county level): NUTS 3 (district level): NUTS 4 (village or town name):	→ *End* → *End* → *End* → *End*	IRRS (-) IRIS (Q6)	MIGRATION HISTORY
Q10.	While in [[*Other country*]/[*survey country*]], did [*you/NAME*] apply for international protection?	01. Yes 02. No 98. Don't know 99. Refused to answer	→ *Q12* → *End* → *End*	IRRS (Q7) IRIS (-)	LEGAL STATUS

TABLE A.2: (cont.)

Number	Question	Response Categories		Statistical Framework	Data Element
Q11.	While in [[*Other country*]/[*survey country*]], did [you/NAME] have the intention to apply for international protection?	01. Yes 02. No 98. Don't know 99. Refused to answer	→ *Q13* → *Q13* → *End* → *End*	IRRS (Q8a) IRIS (-)	LEGAL STATUS
Q12.	What is the outcome of [*your/NAME's*] application for international protection?	01. Refugee status granted 02. Refugee status denied 03. Still waiting for response 96. Other: *specify* 98. Don't know 99. Refused to answer	→ *End*	IRRS (Q8b) IRIS (-)	LEGAL STATUS
Q13.	What is the primary document that allows [*you/NAME*] to stay in [*survey country*]?	NO DOCUMENTS: 01. No documents VISAS: 02. Tourist visa 03. Student visa 04. Work visa 05. Humanitarian visa INTERNATIONAL AGREEMENTS: 06. Regional free movement agreement (e.g. Mercosur, EU, SADC, EAC, ECOWAS) RESIDENCY: 07. Permanent resident document PROTECTED STATUS: 08. Asylum applicant document 09. Refugee 10. Recognized stateless person document 11. Complementary and subsidiary protection 12. Temporary protection ENROLLEMENT DOCUMENT 13. Enrolment document 96. Other: *specify* 98. Don't know 99. Refused to answer			LEGAL STATUS

Sources: EGRISS (2023).

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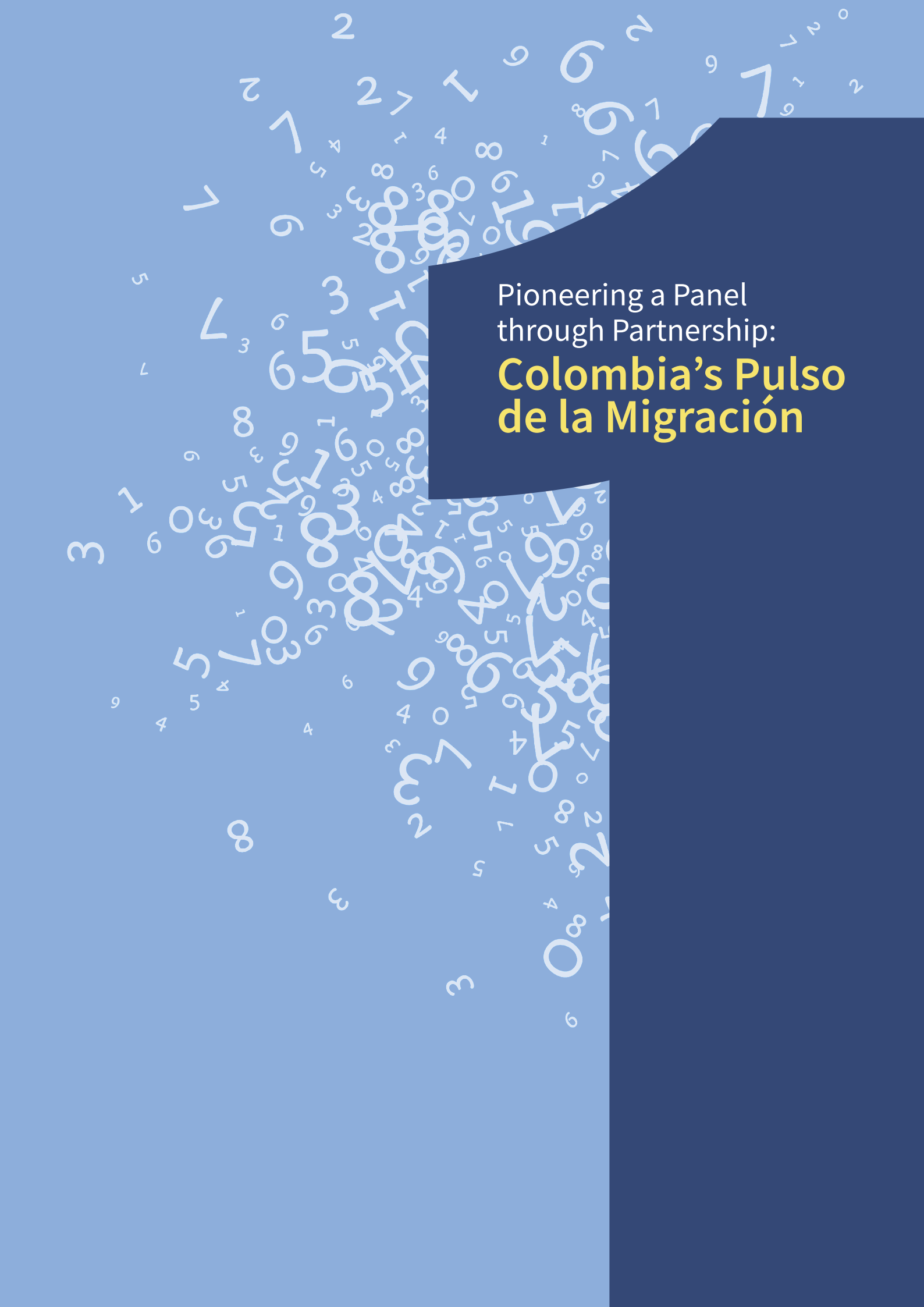
2

PART 2:
Country case studies

This section presents a collection of cases selected to illustrate the practical implementation of many of the principles discussed in Part 1. They are derived from the experience of staff of the Prosperity – Poverty and Equity Global Practice of the World Bank in supporting efforts to collect and analyze data on forcibly displaced populations and their hosts in several countries around the world. As a whole they illustrate efforts in every World Bank region, for low- and middle-income countries, and for refugees and IDPs and camped and non-camped settings. Although the cases were not necessarily written to highlight the themes in Part 1, they were selected by the editors to show what is possible in working through technical, political and financial challenges in integrated FDP data collection. Because each case may illustrate several of the principles discussed in Part 1, the cases are organized alphabetically rather than thematically. Each case is preceded by an Editors' Note that articulates the main themes or lessons relevant to this volume that can be drawn from the country experience.



Pioneering a Panel through Partnership:

Colombia's Pulso de la Migración

CHAPTER 2.1

Pioneering a Panel through Partnership: Colombia's Pulso de la Migración

María E. Dávalos
Jeffery Tanner

Abstract

Colombia is the primary destination for the mass migration from Venezuela – one of the largest movements of people since the Second World War. As nearly three million people have settled in Colombia, the country's efforts to integrate them into society and the economy have been both impressive and challenging. To understand how well these new arrivals were integrating into the local population, the Government of Colombia, with support from the World Bank, Joint Data Center, and later the Interamerican Development Bank (IDB), instituted the "Pulso de la Migración," using a nationally representative sample of Venezuelans – including economic migrants, refugees, and asylum seekers. This phone survey, implemented over multiple rounds, started as a panel – a rare resource in migration data – before being refreshed for the fifth round. The data used the recently completed national household survey as its frame, which had integrated items in its questionnaire that allowed for the identification of Venezuelan migrants and for comparisons with the host population. Each round of the data and analytical results were made publicly available soon after processing, facilitating debate about migration in the national press and politics.[1]

Editors' Note: *The Colombia case highlights the importance of building a vibrant data ecosystem through partnerships, both between multilaterals and the government and between multilaterals. The long-term relationship between the World Bank, Government of Colombia (especially the NSO), and Interamerican Development Bank on Venezuelan migration, for example, has led to high levels of trust that facilitated the development of a novel panel approach to collecting data on migrants and displaced Venezuelans. The sampling frame leveraged a previous large-scale household survey to collect follow-up data on Venezuelans and compare results to national averages from the original household survey, in addition to collecting data unique to the migrant experience.*

1 Note: This case summary borrows heavily from the report "Barriers to the Integration of Venezuelan Migrants and Refugees in Colombia: Policy Lessons from the Migration Pulse Survey" prepared for the World Bank – UNHCR Joint Data Center on Forced Displacement by Luz Karine Ardila Vargas, María Eugenia Dávalos, and Andrés Felipe García-Suaza as part of the Poverty and Equity Global Practice program.

Introduction

Inflows of foreign populations, be they displaced or migrating for other reasons, can affect economies and socio-political dynamics. Much of the academic research on host communities has focused on studying the effect of migration on labor markets (Borjas, 2003; Dustmann et al., 2017; Ottaviano & Peri, 2008; Ottaviano, Peri and Wright, 2018). Other studies explore other dimensions, such as the effects of migration on local prices (Rozo & Sviastchi, 2021), public services, such as healthcare and education (Cortés, 2008; Balkan & Tumen, 2016; Farre, Ortega and Tanaka, 2018; Bratsberg and Raaum, 2012; Ibáñez et al., 2024), and political behaviors (Dustmann et al., 2017; Tabellini, 2020; Rozo & Vargas, 2021). Although some studies indicate that migration flows have positive long-term effects on economic growth (Droller, 2018; Tabellini, 2020; Sequeira et al., 2020; Alvarez et al., 2022), there may be short-term costs to host communities. There may also be inequality in economic outcomes and access to services between host and migrant groups, which can lead to tensions.

The exodus of Venezuelans is one of the largest migration movements in recent decades. As of late 2024 there are around 7.8 million refugees and migrants from Venezuela globally, of which about 2.8 million have settled in Colombia—the main destination of Venezuelans in the region[2]. This migration is unprecedented in the global South. To respond to this large inflow of migrants, the Colombian Government has implemented several policies over the years. From 2018 to 2021, the Special Stay Permit (PEP) was configured and was issued based on the Administrative Registry of Venezuelan Migrants (RAMV). As of 2021 the Temporary Protection Permit (PPT) granted the benefit of regularization for ten years to all Venezuelans, even if they entered the country by irregular means. This policy is one of the main attempts to include the migrant population in the fabric of Colombian society. It has the potential to affect the quality of employment and migrants' income generation capacity.

Several studies focused on understanding the impact this Venezuelan migration has on the labor market in Colombia show that increased migration is associated with variations in the main labor market indicators, improving migrants' employability conditions through remuneration and formality, as well as reducing the incidence of poverty (Caruso et al., 2021; Bonilla-Mejía et al., 2020; Santamaria, 2020; Rozo & Vargas 2021; Lombardo et al., 2022, Lebow, 2024). Economic inequality resulting from this migratory influx was mitigated through the regularization policy (Lombardo et al., 2022).

Despite these broader labor market effects, regularization policies did not have negative systematic effects on native Colombians' welfare (Bahar et al., 2021). However, migrant welfare increased (Ibáñez et al., 2022) and economic inequality decreased (Lombardo et al., 2022). The World Bank (2018) recognizes that, despite negative short-term impacts, the implementation of policies to facilitate migrants' economic integration—such as the regularization process—has the potential to accelerate the long-term positive effects that migrants could have on economic growth.

Leaning heavily on Ardila Vargas, Dávalos and García-Suaza (2023) and internal documentation from the World Bank and the Joint Data Center, this chapter describes how Colombia was able to integrate a first-of-its kind high frequency panel survey on Colombian migrants as part of the suite of regular data collection instruments by the national statistical office. It became the first representative survey designed to understand the needs, challenges and opportunities of this population group. Doing so has provided government, researchers, advocates, humanitarian and development partners, and the media with regular data that is shaping policy and the national conversation on Venezuelan migrants through evidence. The success of the survey was facilitated by several elements:

- **Long-term technical support and trusted relationships between the World Bank and Government of Colombia on migration.** The Bank had been a partner in several early efforts to give evidence-based policy support on potential government responses to high levels of migration (Beach/JDC, *forthcoming*).

2 https://www.r4v.info/es/refugiadosymigrantes; https://www.unhcr.org/refugee-statistics/download. Note that UNHCR has referred to Venezuelans as "refugee-like" and designated all Venezuelans migrating after 2018 as "persons in need of international protection." For simplicity in terms, we collectively refer to them here as "migrants".

- **Leadership and capacity of the National Statistical Office.** The NSO appreciated the need to construct evidence-based policy for this subgroup of the population living in Colombia to augment their welfare and contributions to the economy and civil society. The NSO recognized that such policy would benefit from in-depth data collection and analysis. Moreover, their position as a trusted source of reliable information enhanced the credibility of the findings and made it politically palatable to discuss a topic as sensitive as migration.
- **Pursuit of partnerships.** Partnerships to support the survey with funding and technical expertise and analysis, included the Universidad del Rosario, the World Bank, the World Bank – UNHCR Joint Data Center on Forced Displacement, and the Interamerican Development Bank. Constructive, open conversations between partners strengthened the quality of the instrument and design and encouraged broader buy-in and use of the data.
- **Prescient technical components.** Because the large-scale in-person national household budget survey had questions on country of origin, mirroring the EGRISS standards, that allowed it to identify migrants, the main household survey was able to be used as the sampling frame for the migrant survey and enabled comparison of migrant welfare to that of Colombian nationals. Employing a panel allowed observation of changes over time for the initial rounds, and a supplemental/refresh sample kept the sample size high. Multiple waves of the survey allowed a broad range of topics to be covered and the survey length of each wave to be reasonably short. Finally, a sufficiently dense telephone network enabled a comparatively inexpensive phone survey.
- **Pushing results into public debate.** NSO outreach to news media, including making all data and materials publicly available in usable statistics and storylines, promoted evidence-based debate about migration among the public, politicians and the media.

Policy problem

Despite the promise presented by the suite of regularization policies implemented by Colombia and the several studies that have evaluated their effects, Colombia could not make use of sound and timely evidence to inform its policies and institutional arrangements. For instance, it did not have a way to regularly and reliably measure migration-specific challenges such as regularization status, barriers to the labor market, or perceptions of discrimination, and how these may affect changes to the general welfare of Venezuelans as compared to a similarly representative sample of the host community.

The development of Colombia's *Pulso de la Migración*, or Migration Pulse (MP), is notable for its engagement of the national statistical office and building a broad coalition of partners with a robust, low-cost sampling strategy. Its initial panel nature provided unique insights on changes in migrant behavior and welfare over time. This has helped secure the survey's sustainability.

Curating a data solution by cultivating partnerships

Colombia has a rich recent history and comparative success in developing inclusive programming for Venezuelans, to allow them to contribute amply to Colombia's current and future economy, and the World Bank and UNHCR have played an important role in providing economic analysis that has underpinned that policy success (see Beach 2024, forthcoming). Building on that longstanding relationship, when Colombia determined that it needed representative data closer to real time on migrant welfare, the national statistical office turned to the World Bank.

In 2020, Colombia's national statistics office, the *Departamento Administrativo Nacional de Estadistica* (DANE), engaged with the World Bank and secured technical and financial support from the World Bank – UNHCR Joint Data Center on Forced Displacement to introduce a new survey to DANE's suite of "Pulse" surveys designed to give high frequency measures of important socioeconomic characteristics of households in the country.

Because the World Bank's Poverty and Equity unit served as a main source for channeling funding and technical expertise, coordination and partnership internal to the World Bank was critical to the success of the MP. As with much of the world, migration is a sensitive topic in the region, and the WB team was

very careful to coordinate and share preliminary results with the WB Country Management Unit. This allowed the team to navigate these sensitivities while allowing the World Bank and the government to engage productively on migration statistics and evidence. The Poverty team also involved other World Bank units working on migration, including Social Protection, Social Development, and the research department, to leverage their insights and expertise. This helped ensure the consistency of messages and avoid particularly sensitive issues. These sustained efforts towards internal outreach and coordination paid off in demonstrating a powerful, unified set of policy directions, and most importantly, a robust instrument that could reliably supply policy-relevant information.

External collaboration was also key for the success of regional tasks on sensitive topics. The DANE and World Bank teams reached out early to numerous partners, including UNCHR, academics, multilateral partners, and national stakeholders and agencies. After the initial four-round period of the MP, which was carried out in coordination with the World Bank and the Universidad del Rosario (UR), the Interamerican Development Bank (IDB) stepped in to support subsequent rounds. DANE, World Bank, JDC, and IDB worked amicably together to promote innovative advances on migration data with smooth transitions between funding institutions.

Data structure and sample

The Migration Pulse survey collects information that is complementary to the Integrated Household Survey (GEIH) of the Venezuelan migrant population aged 15 years and older in Colombia. The information collected seeks to characterize reasons for migration, characteristics of the migration process, access to employment, expectations, access to services (health, education, safety nets) and other aspects. It is a measurement that has focused on Venezuelan migrants in Colombia with a longitudinal structure, studying and exploring factors related to the migration process and analyzing migrants' living conditions and their access to services that facilitate their economic and social assimilation.

The sampling for the MP survey rounds was conducted in two stages, at the household and individual levels for households with at least one Venezuelan migrant aged 15 years or older. Household heads responded to the household questionnaire, and an individual aged 15+ was chosen randomly for the individual questionnaire. The sampling frame for the MP is the Venezuelan migrants identified in the 2021 GEIH. The MP survey aims to constitute a longitudinal database in four rounds, enabling labor market variables for the Venezuelan population to be tracked. Since tracking these variables is difficult, each round establishes a replacement mechanism based on respondents from the 2018 GEIH Reform[3]. This structure also allows analysts to match households and individuals between the GEIH and the Pulso surveys, thus leveraging the rich data from that primary household survey and providing valuable comparisons with the Colombian population. The sample is representative of the 7 municipal areas (MAs) that host 87% of Venezuelans in Colombia.

Table 6 presents the number of observations and the survey collection period. It also shows the percentage of people who continued in the following rounds. The panel structure of the data did not continue beyond round 4 due to the mounting attrition rate.

The panel structure of the survey allows researchers to follow the same individuals over multiple rounds, providing insights into individual-level changes, such as labor market transitions, access to services, and integration processes. Complementing the panel structure, the high-frequency nature of the survey allows it to track changes over time: conducted multiple times a year, the MP survey tracks changes in the Venezuelan migrant population's experiences, attitudes, and access to services over short periods, crucial for understanding integration processes and policy impacts and reports them back in near real-time. The high frequency allows for a nuanced understanding of short-term impacts, such as the immediate effects of new regularization programs or economic downturns.

3 The 2018 GEIH Reform refers to GEIH implementation, updating the 2018 Geostatistical Framework with the results of the most recent population and housing census. In addition, it considers the intersectionality approach within its representativeness: farmers (campesinos), LGBTI, and people with disabilities.

TABLE 6: Features of the Migration Pulse survey Rounds 1-7

Round	Principal Partner	Number of observations	Collection period	Continuing sample in panel (rounds 1-4)
1	World Bank/JDC/UR	7,996	July-August 2021	100%
2	World Bank/JDC/UR	7,633	October-November 2021	78.5% (5,995)
3	World Bank/JDC/UR	6,744	January-February 2022	67.9% (4,578)
4	World Bank/JDC/UR	8,394	March-April 2022	43% (3,662)
5	Interamerican Development Bank	6,582	March-April 2023	N/A (Cross-Section)
6	Interamerican Development Bank	6,239	August – September 2023	N/A (Cross-Section)
7	Interamerican Development Bank	8,022	April – May 2024	N/A (Cross-Section)

Findings and policy implications

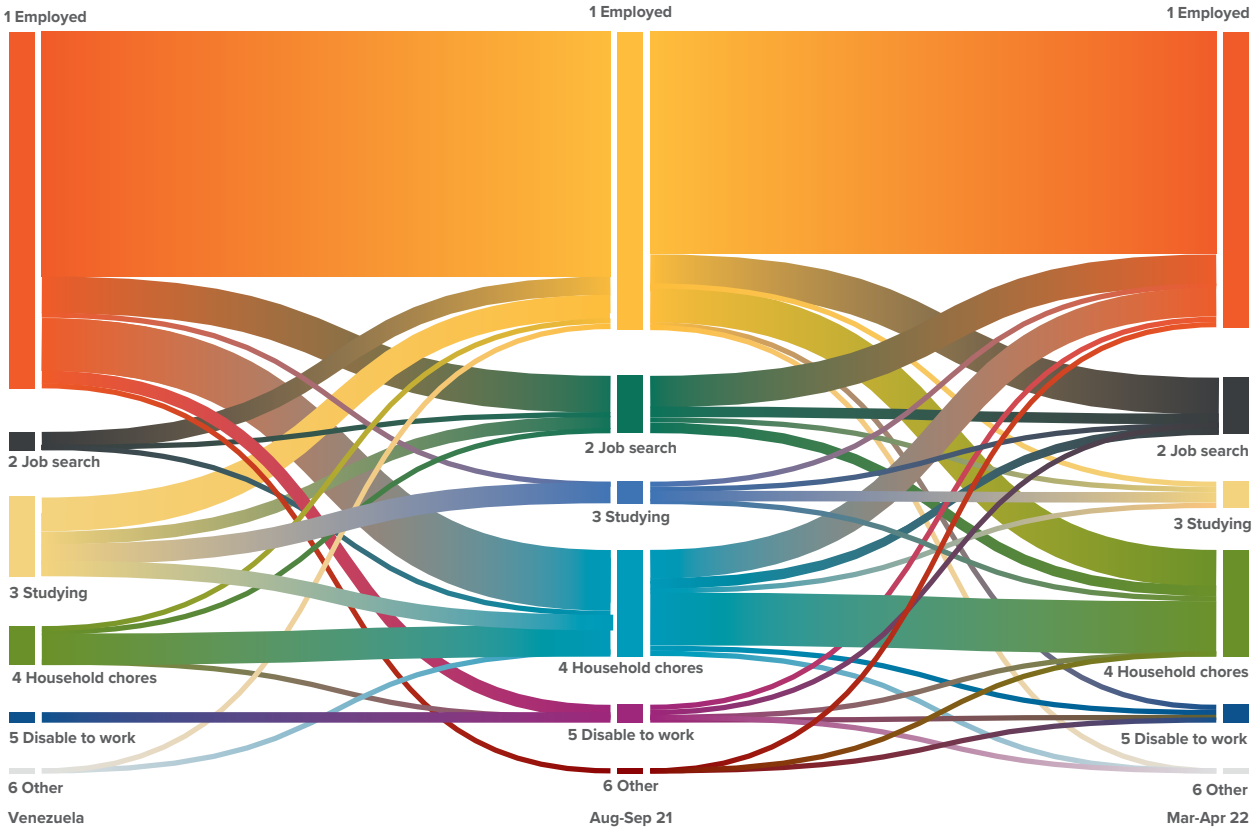
The following are select findings from analysis of the rounds supported by the World Bank and JDC, illustrating some of the analytical insights gained through the data, particularly the panel nature of the data such as the dynamic labor market analysis. Although a broad analysis of migrants' access to services and their labor situation is possible using other data sources, the MP survey provides detailed information that allows a deeper understanding of the factors driving the outcomes and dynamics observed. For example, identifying the role of information as a determinant in access to services and the regularization process, or identifying the role of networks as a mechanism for labor intermediation have all been studied thanks to the MP data.

The analyses of the MP provided relevant insights for public policy, as documented in Vargas, Dávalos and García-Suaza (2023). For example, the data is uniquely able to provide information on the migration decision and journey. The MP illustrates that most migrants traveled to Colombia with other members of their family (68 percent), while 27 percent migrated alone. It also reveals, however, that this pattern changed with the deterioration of Venezuela's economic conditions and the increase in migration flow. In the early stages prior to 2017, there was a higher incidence of migration of the nuclear family.

The MP also highlights labor market patterns and challenges for the migrant populations. Based on an analysis of transitions between migrants' main occupation in Venezuela and their main occupation in Colombia, there are three relevant observations. First, there is a significant reduction in the proportion of Venezuelans who are studying, which implies a potential loss of human capital in the medium term. Among the population between 15 and 24 years, the first round in August 2021 found that 15 percent were studying in Colombia, while 28 percent were studying in Venezuela. Second, there is a significant increase in the proportion of Venezuelans looking for work, which is consistent with the increase in labor participation and the higher opportunity cost of engaging in income-generating activities.

Finally, there is an increase in the proportion of migrants dedicated to housework, which is related to a reorganization of household chores. In other words, as households reunify and lose their support network in Venezuela, a greater demand for care falls on the members of the household, which forces a greater division in the use of time. Only 8 percent of migrants in Venezuela were dedicated to housework, while in Colombia the figure reaches 21 percent. In aggregate, a lower employment rate is observed compared to migrants' initial conditions in Venezuela, with small variations over time (see Figure 7) when comparing Rounds 1 and 4 of the MP survey. In this comparison, the significant flows between unemployment status, dedication to housework, and employment status stand out.

FIGURE 7: Transitions from main occupation in Venezuela, August-September 2021, and March-April 2022

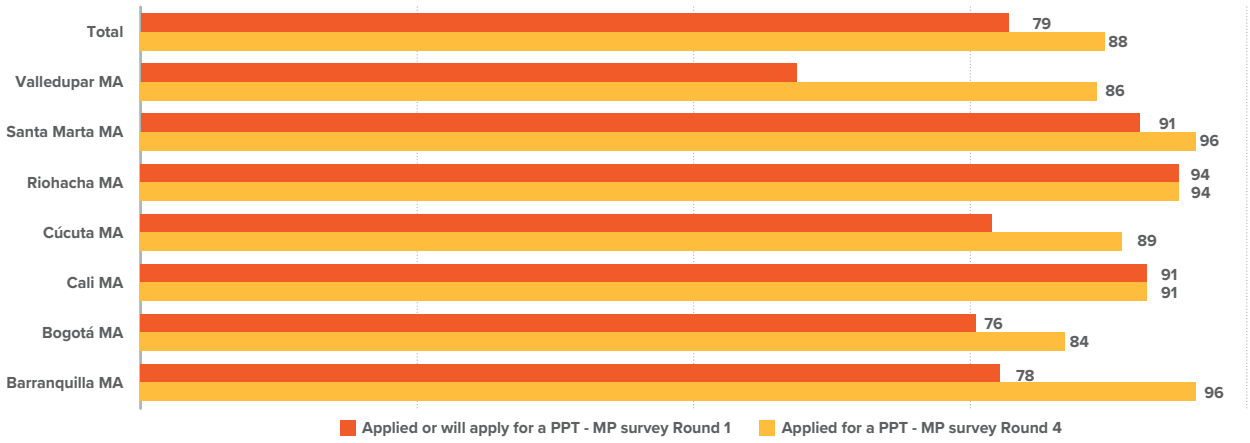


The MP survey data provides valuable insights into the role of regularization policies in providing better access to economic opportunities for migrants. Migrants with regular status have better employment conditions, while the rest have lower income and lower quality jobs, as well as lower access to healthcare and education services. A regression exercise that seeks to identify factors associated with migrants' labor income, reveals that regular migrants have an income 4.9 percent higher than returnees, while for irregular migrants, labor income is 23 percent lower on average. The analysis also demonstrates increasing returns on the level of education.

The MP also provides information on the take-up of government policies. Despite the evident importance of the Temporary Protection Permit (PPT by its initials in Spanish) for job placement and improvement in employment conditions, as of 2021, there was ample room for growth. According to the data in the MP survey, 66 percent of the migrants surveyed in 2021 were aware of the permits, though with marked regional differences (see Figure 8). Migrants who were not aware of the PPT were young, with low levels of education. They also did not register in earlier variations of migrant work programs. However, after almost a year, the willingness to apply for the PPT stood at over 88 percent of migrants who were aware of it. Comfortingly, regions that exhibited the lowest rates of application in the first round of the MP had the largest increases by the end of the panel period.

The core analytical finding offered by the MP is that migrant regularization can maximize their contribution to the economy as well as improve their quality of life. In Colombia, significant progress has been made in this regard through efforts to regularize migration status, which, as the analysis shows, facilitates greater access to services and better-quality jobs (see also Urbina et al., 2023). This process also opens the door for designing integration programs focused on migration, such as employability and job placement programs (particularly to fill labor supply gaps in certain occupations and regions of the Colombian market) or support programs for higher education, both with

FIGURE 8: Percentage of the migrant population that applied or would apply for the PPT in Round 1 of the MP survey, versus the share that applied for a PPT in Round 4



Note: The selection of metropolitan areas is given by sample representation in the MP survey.

short- and long-term impacts on household income. These programs must consider that certain groups of migrants, particularly young people and women, face greater barriers to accessing employment and services.

Moreover, investing in public information campaigns can help reduce gaps in access to services and raise greater awareness of the access opportunities offered by regularization programs. In Colombia, interventions that increase access to information can maximize their impact by targeting the information media most used by migrants. The MP data indicates that social networks are the main source of information for this population.

Targeted local policies that are coordinated with the national government and focused on the needs of the Colombian and migrant populations in each region can close the gaps more effectively. There are profound regional differences in several dimensions, such as regularization program progress and healthcare affiliation. This heterogeneity could inform focused efforts with meaningful local variation in intensity of policy responses.

Dissemination and sustainability

Following each survey round, the national statistical office produced a press release and held a press conference led by the Director of the institution[4]. This allowed findings to be quickly disseminated throughout the country and helped to positively frame the mainstream discussions on migrants in the national discourse. The leadership of the NSO at these pressers also showed strong high level governmental support for the surveys and helped to underpin the credibility of the survey findings.

The news media in Colombia has published dozens of articles based on this data, in large part due to these press conferences[5]. Indeed, the survey results have garnered significant media attention beyond standard print media, with several radio interviews, and social media mentions. Additionally, important government, academia, civil society stakeholders and partners have commented on the survey results.[6] The surveys have generated interest and raised awareness about the importance of regular national migration surveys that focus on recent migration and allow for disaggregated analysis of

4 For example, see https://foromundialdedatos.dane.gov.co/es/ultimas-noticias/presentacion-de-los-resultados-de-la-encuesta-pulso-de-la-migracion for resources around the most recent launch, or for a video of the press briefing with highlights from the first round, see https://www.youtube.com/watch?v=g5BRMg8qBjM

5 For some examples, see https://www.eltiempo.com/justicia/investigacion/encuesta-pulso-migracion-dane-96-de-venezolanos-quieren-quedarse-625468; https://www.bloomberglinea.com.mx/2021/10/15/cinco-datos-que-evidencian-las-condiciones-de-migrantes-venezolanos-en-colombia/; and https://www.larepublica.co/economia/bachilleres-y-con-hijos-es-el-adn-de-los-venezolanos-que-han-migrado-a-colombia-3247959

6 See for example Ardilla Vargas, Davalos, and Garcia-Suaza, 2023.

the main migrant groups. In Colombia, the *Pulso de la Migración* has continued beyond the initial four rounds. The Inter-American Development Bank (IADB) committed funding for two additional rounds in 2023 and 2024, based on the methodology developed for the MP. The sustained effort to continuously track welfare measures of noncitizens is highly commendable.

Practical lessons

Beyond the important statistical findings revealed by the MP, there are several lessons that stem from the way it was conducted.

First, several innovative features to the survey design increased their usefulness for informing this policy agenda with potential to serve as an example to guide similar efforts in other countries. The Pulso de la Migracion has several features that are innovative and among the first of their kind – particularly in Colombia, but also in the broader body of survey data on displaced and migrant populations. Most surveys on displaced or migrant populations are done in a single round by an interested civil society or international partner, using a nonrandom sampling strategy, and the data is kept proprietary. The panel structure is quite rare for surveys of mobile populations giving a longer time series to track progress and snags in their economic and social integration.[7] The public, multi-round (panel and repeated cross section) data collected by the national statistical office can be compared to hosts and has lasted well-beyond its initial mandate. The MP data demonstrates that these desirable data characteristics are possible to gather and prove extremely helpful.

Data collection and analysis should always push for innovation, in terms of methods and tools, and these should be adapted to the different country contexts. Because this task was developed amid the pandemic, the teams had to rely on telephone surveys (as opposed to face-to-face surveys as originally planned), and innovative sampling strategies that had not been used before. But the phone surveys allowed the survey to stretch the budget and implement more rounds to better understand dynamics over time.

Second, data comparability, between host populations and migrants and refugees, is extremely valuable. The MP allowed these comparisons with local or host populations, giving further visibility to the challenges by migrants and refugees. However, multiple studies (World Bank, 2018a; World Bank, 2018b) emphasize the need to not only address the impacts related to the migration process, but also the pre-existing needs of the local population, mitigating potential negative impacts and maximizing benefits for the host communities. This allows policymakers to consider actions that are beneficial to a broader population, making them both more effective in improving economic productivity and welfare, but also contributing to building broader political support by addressing the needs of the migrant population and the host communities.

Third, the impact of data collection efforts can be maximized if the data is made available to wider audiences. As a hallmark of nearly all JDC-supported surveys, the microdata, questionnaires, and methodological notes for the MP have all been made publicly available to increase transparency and promote research and statistical inclusion[8]. The survey has become a key source of information on Venezuelan migrants in Colombia.

Fourth, building partnerships and ownership have positive impacts on the design, implementation and sustainability of the surveys. The process of developing the survey fortified partnerships with the national statistical office to produce quality microdata on this population, building capacity, and ownership and helping create the space at DANE to have focused data collection efforts and policy discussions on this otherwise-invisible population. This ownership also encouraged greater confidence in the results and a willingness to use them by other parts of the government.

Similarly, the effort further promoted collaboration within and outside the World Bank, including building a closer partnership with UNHCR and academic institutions. Near- to medium-term sustainability

7 Fortunately, through the work of the World Bank – UNHCR Joint Data Center and others, displaced and migrant populations are beginning to be more regularly integrated into NSO operations.

8 See https://www.dane.gov.co/index.php/estadisticas-por-tema/demografia-y-poblacion/encuesta-pulso-de-la-migracion-epm

was ensured by encouraging conversations with the Interamerican Development Bank. Thanks to the support of the IDB, the MP completed its eighth round in May-July and held a press conference with findings in October 2025.

Fifth, data alone is not enough: knowledge generation is necessary to leverage the data to inform policy. The MP data has facilitated numerous reports and briefs, creating knowledge on the opportunities and challenges faced by this population, and contributing to our internal and external dialogue. These analyses have influenced policymaking and the broader public. Data from the *Pulso de la Migracion* informed the government's Policy Document "Strategy for the Integration of the Venezuelan Migrant Population as a Development Factor for the Country" (CONPES 4100), outlining a 10-year intersectoral government strategy for the integration of migrants to harness their contribution to development. Furthermore, MP data is informing the national statistics office (DANE)'s Migration Statistics Viewer,[9] which combines information from the MP survey with administrative records from the Colombian Office of Immigration and the National Training Service (SENA), among others, to give an overview of patterns of migration, as well as insights into discrimination and regularization.

The data are also being incorporated as part of the Migration Observatory led by the National Development Plan, including discrimination data for its Multidimensional Index on the Socioeconomic Integration of the Venezuelan migrant population in Colombia. The data informed the analytical underpinnings of Colombia's $700 million Equitable and Green Path Development Policy Financing II.

Finally, it is important to continue strengthening, monitoring and complementing statistical efforts to collect data on migrants and refugees. The MP is a valuable instrument that should continue to be integrated into the country's regular data collection processes led by DANE. The survey does have limitations, notably that its sampling structure focuses on those municipal areas that are home to some 87 percent of the Venezuelan population, rather than the entire Venezuelan population in Colombia. Moreover, the structure and sample size limit the level of disaggregation by geography (particularly rural areas) or other dimensions. As such, other sources of data, including administrative data sources that include the migrant population, should continue to be collected and strengthened. Even so, the MP survey's high-frequency and panel structure provide a powerful tool for understanding the integration of Venezuelan migrants in Colombia, offering valuable insights for policymakers and organizations supporting migrant integration.

9 https://sitios.dane.gov.co/visor-migracion-nacional/index.html

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Statistical Inclusion of Displaced

Populations in Djibouti

CHAPTER 2.2

Statistical Inclusion of Displaced Populations in Djibouti

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Abstract

This chapter explores the living conditions, economic integration, expressed needs and aspirations of migrants, refugees and undocumented residents living in Djibouti. By using a qualitative approach, the study employs an innovative tool to identify and characterize large under-studied population groups with limited inclusion in official statistics. Thus, the chapter conceptualizes these categories of populations as four groups: 1) Refugees and asylum seekers. 2) Long-term undocumented residents. 3) Recent migrants. 4) Djiboutian nationals. Overall, these migrant and undocumented populations share difficult living conditions and multiple deprivations, in terms of housing, education, livelihood opportunities, and legal exclusion. Most undocumented and refugee participants expressed difficulties in meeting their basic needs in terms of food, shelter and water. They also reported great uncertainty about their income sources and the frequency of their income, hampering their ability to satisfy those basic needs and to smooth their consumption. Healthcare appeared relatively accessible, but access to education could be particularly problematic as many face barriers to enrolling their children in schools. The report makes recommendations on 1) Counting migrants and undocumented populations in official statistics. 2) Regularizing legal status. 3) Creating opportunities and bolstering social protection for these populations. This work reflects the importance of qualitative evidence to inform other quantitative statistical products to ensure that populations that may otherwise be "hidden" are seen, surveyed, and heard.

Editors' Note: *The Djibouti case is unique in its documenting an approach to discovering the size of a population that had largely existed in the statistical shadows. Although quantitative data on refugees had been collected recently through phone surveys using UNHCR's registries, the magnitude of a parallel undocumented population was unknown. This case illustrates the value of qualitative data approaches to inform formal quantitative data collection efforts in the Government of Djibouti's admirable endeavor to understand the welfare of all people within its borders.*

Introduction

At the crossroads of the region's migratory routes, Djibouti constitutes a complex migratory landscape. Indeed, the country attracts many populations from the Horn of Africa seeking either to settle permanently, to transit towards third countries or to seek refuge and asylum. In a region fraught with tensions, Djibouti has constituted a peaceful and welcoming refuge for many populations fleeing conflict. Djibouti's economic prosperity and peace also attracts economic migrants (mainly from Ethiopia), some of whom are transiting or working mainly as domestic workers for Djiboutian families. In addition, Djibouti hosts a large undocumented population that includes individuals either born abroad or in the country, who are socially and culturally integrated within the Djiboutian society but lack the documentation that would give them formal residence and allow them to fully participate in the national socioeconomic life.

Local estimates vary, particularly due to the absence of the migrant population in official statistics, but it is thought that these groups (including undocumented individuals) represent around 100,000 to 200,000 people. Refugees and asylum seekers, on the other hand, constitute a much smaller group of 31,528 persons (as per 2024 UNHCR estimates). They benefit from formal legal protection through their recognized status and from progressive laws (for instance the 2017 refugee law). Nevertheless, most refugees are hosted in remote camps, called refugee villages, with limited prospects of social and economic integration and are subject to harsh living conditions. Despite Djibouti's welcoming stance to the various migrant populations, the burden on public service provision, including health, education, and infrastructure, as well as security considerations could constitute a strain on the country's limited capabilities.

Because these migrant and undocumented populations are not included in official statistics, it is difficult to tailor appropriate and relevant policies that both cater to their needs and also reduce the burden on public service delivery and optimize their productive capacity to the benefit of the state. To fill the knowledge gap in the understanding of the various migratory populations in Djibouti, including its typography, and to inform future surveys and censuses on capturing this population, an innovative choice has been made to develop a qualitative survey. Through extensive qualitative fieldwork, this study explores the living conditions, economic integration, expressed needs and aspirations of migrants, refugees, and undocumented residents in the country. It aimed to give a voice for these populations through 48 focus group discussions (including 266 individuals) facilitated by a moderator and interpreters in various urban, rural and refugee village sites across the country in February and March 2022. These discussions strive to gain in-depth understanding of lived experiences of migrant and undocumented populations.

The analysis gave rise to three categories of migrants. First, the refugee and asylum seekers who arrived in the 1990s mainly from Somalia and Ethiopia while others entered Djibouti more recently, fleeing the war in Eritrea, Yemen or Ethiopia. Second, the recent economic migrants who are settled in the country for varying lengths of time, actively working or seeking work, often remitting to their families abroad, and with an intention to continue their journey to a third country or return home. Thirdly, the long-term undocumented residents who lack national identity documents or residence cards but have been integrated socially in the country for many years. Many had arrived in Djibouti years or even decades ago, or were born to non-Djiboutian parents in Djibouti, and tend to identify as Djiboutians themselves.

Among these three groups of population, only the refugees and asylum seekers have an official status in the country and therefore are counted and included in the official statistics, such as census or household surveys. Some of the recent migrants are themselves transitory migrants but are difficult to distinguish from other economic migrants who have settled more permanently in Djibouti. These two groups of population, because they have no legal presence in Djibouti, are often omitted from official statistics and policy discourse. Indeed, Djibouti does not provide either residence cards or work permits to these undocumented groups while implementing very restrictive citizenship policies.

The study reveals the harsh realities faced by these groups, including precarious living conditions, limited access to education and healthcare due to

documentation issues, and challenges in securing safe and decent work. Despite these hardships, the study notes the resilience of these communities, their coping strategies, and the role of informal networks in providing support. The report also highlights the discrimination and exploitation faced by migrants and refugees, which is not unique to Djibouti but a global issue affecting their economic contributions and integration. It underscores the importance of including these populations in official statistics and regularizing their legal status to unlock their potential and benefit the host society. The study concludes with policy considerations focused on counting migrants in official statistics, regularizing legal status, and creating opportunities to improve their living conditions and social protection. These measures are seen as mutually beneficial for the government and the populations in question, helping to manage the complex migratory landscape effectively.

Data

By using a qualitative approach, this study employs an innovative tool to identify and characterize large under-studied population groups with limited inclusion in official statistics. This approach enables an improved understanding of migrants, refugees, and long-term undocumented residents' living situations and characteristics in Djibouti. The study sites were chosen to reflect various regions in the country: Djibouti City, Obock, Tadjourah, Ali Sabieh, Arta, and the three refugee villages (Ali Addeh, Markazi, and Holl Holl). In addition, some sites were chosen in the International Organization for Migration's (IOM) Migration Response Center (MRC) in the city of Obock. In Djibouti City, the fieldwork was undertaken in ten neighborhoods where poor and undocumented migrants are particularly represented. These neighborhoods were chosen after careful study of the characteristics of each zone between the Migration Division of the Djibouti National Institutes of Statistics (INSTAD) and the World Bank team. Several discussions also took place with key stakeholders, such as ONARS (Office National d'Assistance aux Réfugiés et Sinistrés), an agency of the Ministry of Interior as well as ADDS (Djibouti Social Development Agency) to collect stakeholder perspectives regarding the migrant population and their needs in terms of data and constraints therein for effective service delivery. The sample was purposive in terms of locations, genders, ethnicity, and nationality of participants. In total, 48 focus group discussions (with 266 individual participants, 51 percent males and 49 percent females) and four individual interviews (with focus group members) were undertaken between February 26 and March 31, 2022.

The choice to adopt focus groups (i.e. group discussions) as the data collection methodology was primarily to allow for a participatory approach and to explore the lived experiences as well as the feelings, attitudes and aspirations of the populations of interest. This method is ideal for exploring people's talk, experiences, opinions, beliefs, wishes and concerns. It is particularly useful for allowing participants to generate their own frames, concepts and questions, and to pursue their priorities on their own terms, in their own vocabulary.[10] It is used to delineate consensus and dissent among group participants. Methodologically, a focus group discussion helps in identifying the problem with the community, and gives the community the possibility to control the process while ensuring the engagement of researchers in it. Whilst a few individual interviews were conducted with focus groups participants in order to further explore their personal experiences and life trajectories, the focus groups methodology was privileged in order to obtain a greater picture of the groups' living conditions and aspirations within the limited time allocated to fieldwork. In addition, the field team recorded its observations made during the site visits and focus groups in a field notebook and the report occasionally refers to these and previous research conducted by the lead field researcher.

Methods

In the absence of a sampling frame conducive to designing the focus groups according to nationally representative characteristics of the migrant and undocumented populations living in Djibouti, a purposive sampling design was adopted. The number and composition of the focus groups were decided based on characteristics including

10 Frisina (2018)

geographical location (neighborhoods, urban/rural, refugee villages), ethnicity, gender and nationality/ legal status. Participants were then recruited with the help of a field team from INSTAD and community leaders. In each neighborhood, multiple entry points and snowball sampling were used in order to recruit participants based on the above-mentioned criteria. The focus groups were composed of four to eight individuals. Participants were, to a large extent, homogenous in terms of gender, ethnicity, nationality, and legal status. Sessions were held in local community homes with the help of the INSTAD field team which acted as facilitators and interpreters, and lasted between one and two hours. These known and accessible locations for the participants facilitated the discussions. The objectives of research and the commitment to the anonymity and privacy of participants identity were explicitly stated to the participants. Prior to each focus group discussion, consent was sought from all participants, and their rights were laid out including the right to refuse any question or to leave at any time if they wish.

The study was intended to provide depth in topics covered, so no attempt is made at its statistical representativeness. Instead, the aim was to achieve an in-depth understanding of lived experiences of migrants, undocumented individuals, refugees, and local population in Djibouti. A topic guide was developed based on stakeholder consultations, literature review, and expert reviews in order to tackle the key issues facing migrants and refugees: housing, education, safe and decent work, quality of life, and aspirations. The topic guide was the basis of semi-structured discussions and interviews, as such, some questions and topics were adapted in situ to ensure conversation flow and allow individuals to guide the discussions. This approach allowed researchers to effectively identify the salient themes and topics that these populations were most concerned with, which was very important given the lack of background information and data available on most of these groups. Questions were framed to avoid direct or personal questions as much as possible, and to maintain a tone of conversation that sought the participants' peer groups' views and experiences. As the fieldwork progressed, the questions were reworded and adapted in order to be as relevant and as close as possible to the respondents' concerns, and to reflect the specificities of Djibouti's migration landscape. Some issues were reduced, and others were expanded depending on the importance the respondents attached to the various issues. Interviews and focus group discussions were recorded, translated and transcribed. Data were stored securely on World Bank drives and analyzed thematically using Nvivo software. All recordings and transcripts were anonymous.

Results

Categorizing different groups of population

The analysis leads to the conceptualization of these different populations as four groups: a) recent economic migrants, b) refugees and asylum seekers, c) long-term undocumented residents, and d) Djiboutian nationals (see Table 7). However, those categories, while they offer an analytical distinction grounded in the data collected and field observations, are not necessarily mutually exclusive. For instance, it is not uncommon for an individual to have once had a refugee status but to currently be undocumented after losing their documents in a fire or flood. The study uses the term recent economic migrants for people who are settled in the country for varying lengths of time, actively working or seeking work, often remitting to their families abroad, and with an intention to continue their journey to a third country, or return home. Therefore, some of the recent migrants are themselves transitory migrants, but are difficult to distinguish from other economic migrants who have settled more permanently in Djibouti. Refugees and asylum seekers have fled violence and sought refuge in Djibouti. This group is often found in refugee villages, but not exclusively. Indeed, many refugees are found in urban areas working or seeking work. As such, they share many of the characteristics of economic migrants, but have a refugee card that allows them access to certain services.

One of the most complex categories, which is often neglected in policy discussions, official statistics, and public discourse, is Long-Term Undocumented Residents (LTURs). Many had arrived in Djibouti many years or decades ago, or were born to non-Djiboutian parents in Djibouti, and tend to identify as Djiboutians themselves, given their social

assimilation, tight ethnic proximity, and sense of belonging. In fact, several of those classified in this category expressed that they do not observe geographic/political boundaries. For those who did migrate to Djibouti (as opposed to being born there), their initial crossing of a border, which in the view of some of them is arbitrary, did not necessarily classify them as a migrant. To add to the complexity of their lived experience, in some cases, family members of LTURs are Djiboutian nationals, by marriage or blood, or have some form of legal documentation.

Understanding the living conditions, economic integration and aspirations of an understudied population

Overall, these migrant and undocumented populations, as well as some of the vulnerable Djiboutians interviewed, share difficult living conditions and multiple deprivations, in terms of housing, education, livelihood opportunities, and legal exclusion. They all tend to live in precarious and often squalid and overcrowded conditions, and many struggle to pay their rent, despite it being their main spending priority. The most destitute resort to moving to peripheral areas of Djibouti City where they settle in squatter encampments and build houses from whatever material they can salvage, a strategy particularly common among LTUR populations. Others resort to being hosted by family, living at their workplace (common among recent economic migrants) or even on the streets in order not to pay rent. Those who have inherited houses tend to divide their dwellings and rent each square meter to others in order to make ends meet. Most of the studied populations see the pool of affordable housing shrinking in the face of the development of real estate programs aimed at middle-class households. Even those who own their houses are at risk since they often do not possess any formal papers proving ownership.

TABLE 7: Description of the different categories of the study population

Category	Description
Recent economic migrants 1. Recent migrants (non-refugees who arrived in the last 5 years) 2. Transit migrants	Many recent economic migrants live in Djibouti without residence permits. 1. This group includes economic migrants from surrounding countries - mainly Ethiopia and Somalia - and since the war, some from Yemen who are not formally refugees. Due to the fixed exchange rate of the Djibouti franc with the dollar, the strong economic growth and the peace the country offers, these populations come to undertake low-skilled jobs such as housekeepers and nannies, gardeners, or construction workers and return to their country once they have reached their goal. 2. A new category of short-term economic migrants formed itself in the mid-2000s. Tens of thousands of migrants from the neighboring countries cross Djibouti every year to reach the Arabian Peninsula. They stay in the country for a few months or years while securing enough money to pay for the rest of their journey or until political instability stops jeopardizing their travel.
Refugees and asylum seekers 1. Recent refugees 2. Protracted refugees	This category refers to persons who have fled conflict and are under the protection of the 1951 Geneva Convention or whose refugee status is being considered at the time of the survey. Although they share the same status, it is possible to differentiate between two broad groups of refugees. 1. Somali protracted refugees arrived from Somalia and Ethiopia in the 1990s. 2. Other refugees have arrived during the last decade. They fled and continue to flee the war in Eritrea and Ethiopia (mainly from Tigray and Oromia provinces) as well as in Yemen.
Long-term undocumented residents (LTUR)	This category refers to people lacking national identity documents or residence cards, but who have been integrated socially in the country for many years. They may be husbands and wives of Djiboutians, people who arrived during their childhood and grew up in the country, people born on Djiboutian territory to non-Djiboutian parents, or people who have only one Djiboutian parent. Long-term, undocumented residents belong mainly to either Afar or Somali ethnicity. Some of these populations have identity cards from foreign countries, and others can be classified as stateless populations.
Djibouti nationals	This category comprises people who have a Djibouti identity card. It does not include people who have only birth or marriage certificates.

The government of Djibouti made important efforts to make public services (such as education and health) accessible to all, but certain difficulties at the point of service persist. While the law guarantees access to education, especially to refugees, difficulty in accessing school for some is due to overcrowding at schools, discretionary refusal, or lack of valid identity documents. These barriers include legal ones, related to documentation, as well as the application of legal statutes. As children without identity papers (e.g. birth certificates) seem to have difficulty accessing public schools, parents resorted to different strategies to provide them with an education: registering them as children of a relative with papers, sending them to Koranic or private schools, sending them to refugee village schools or even to schools in Ethiopia. Some parents are also facing the barrier of the costs of schooling. Thus, many children in these communities cannot access school, a situation further jeopardizing their future. Access to health services appeared satisfactory to the focus groups' participants, regardless of their status, especially at the level of primary provision and community health centers. However, it is largely restricted for those without a national social security fund card (CNSS[11] card) and by the costs of non-basic health services. Some specific needs were also expressed, especially in refugee villages, in relation to maternal health, the affordability of medicine and access to social security for those entitled to it. In some circumstances, LTURs in Djibouti could face the risk of statelessness due to unclear citizenship status. Many LTURs claim to have been socially integrated for years, yet they lack national identity documents. By understanding the risk of statelessness and measuring it accurately through national surveys, the challenges faced by LTURs can be better addressed, and their inclusion in national statistical systems is more likely.

Access to safe and decent work is a significant challenge to most of the participants across the categories, in a context where informality, scarce employment opportunities and low wages are prevalent. The qualitative data suggests that most men work as daily laborers (construction workers, dockers), while the women are concentrated in housekeeping jobs. Whether relying mainly on their husband's income or on their own, women also tend to resort to entrepreneurial activities to provide for their families (for instance small food stands). The very difficult living conditions and the scarcity of jobs in the refugee villages and local labor markets mean that family members – usually young women - are sent to work in the city and remit to their family in the refugee villages. The lack of jobs available locally is pointed out by participants as the main reason for unemployment, especially in refugee villages, rural areas and small towns. This situation is worse for undocumented individuals as identity papers facilitate access to the limited available economic activities and to better working conditions. Low levels of education and the inability of many to obtain jobs despite their diploma are also noteworthy. Finally, as some of these migrants face challenges as to their legal presence in the country, indicative evidence suggests they may endure exploitative working conditions, and some express perceptions of being discriminated against due to their migrant background. This phenomenon is not unique to Djibouti, and in many countries, migrants and refugees also face discrimination in the workplace and in the housing market, as well as in their access to social services, due to their race, origin, language, ethnic, cultural, and religious background. In fact, according to the World Development Report (WDR) (2023), migrants frequently face discrimination even when they originate from a neighboring country (with very similar language and culture), which affects their economic performances and compromise their positive impacts for host countries.

Most undocumented and refugee participants expressed difficulties in meeting their basic needs in terms of food, shelter and water. They also reported significant uncertainty about their sources of income and the frequency of that income, hampering their ability to satisfy those basic needs and enjoy smooth consumption. They reported that they felt the situation had worsened over the years, and that they usually had no other choice than going into debt to satisfy their daily needs. Despite their strenuous living conditions, their definition of a poor household referred to individuals with disability, poor health, inability to seek medical help, or afford food or transport to medical facilities. The situation of refugees, however, appears particularly difficult, due to their multiple deprivations, especially acute

11 In french, « Carte de la caisse nationale de sécurité sociale ».

with respect to food provision and their limited agency.

Faced with these difficulties in meeting their basic needs, participants develop coping strategies and resort to robust solidarity networks, and entrepreneurial endeavors to make ends meet. Overwhelmingly, they tend to seek help within their immediate neighborhood, which have emerged through the focus group discussions as key informal institutions that provide a safety net. In most cases, though not all, neighborhoods are ethnically homogenous. Therefore, the distinction between neighborhood and ethnic solidarity is blurred. The main safety network for food and emergency aid lies in the local shop where most respondents seemed to ask for credit on a regular basis, and in neighbors, who share their food. They also rely on clan and family solidarity, especially in finding jobs or gaining access to services and opportunities that are only available to those with legal documentation, for instance to obtain the permit to open a shop or to enroll children at school. This situation results in nepotism and favoritism, and fuels relations of domination between nationals and non-nationals, sometimes within the same community group, which lead to unfavorable working conditions.

In terms of migration aspirations, most LTUR participants want to stay in Djibouti due to a strong sense of belonging, despite their lack of a state-recognized status. Bound by long-standing ethnic and clan-based links to the territory, an attachment to their neighborhood and valuing the peace and economic opportunities the country offers, these populations do not tend to exhibit strong international migration aspirations. Indeed, due to the perceived arbitrariness of national boundaries, those who have migrated to the country - as opposed to being born in it - do not recognize having crossed them. Living in extreme poverty, in makeshift or severely degraded houses, these people aspire mainly to move to neighborhoods or cities within Djibouti offering better living conditions. However, their mobility is constrained by their poverty and lack of local support networks. Aspirations to emigrate – as onward or return migration – are strongest amongst refugee and more recent migrant populations (including Yemeni and Ethiopian) working or transiting in Djibouti.

Policy implications

A first policy implication from this qualitative work is to count all refugees, migrants and undocumented populations in official statistics. Indeed, existing censuses and surveys, such as the household budget survey EDAM4 of 2017 and the general population census 2009, exclude this sizable portion of the population and only survey Djiboutian nationals (and sometimes a few refugees living in refugee villages), as it is often the case in other destination countries (WDR, 2023). Indeed, the WDR (2023) highlights that data are needed to inform policy making and help understand its economic and social impacts on the destination country. The inclusion of these populations requires investment in better sampling frames as well as devising adequate survey instruments that allow the categorizations of people accurately.

Including refugees, migrants and undocumented individuals in official statistics allows the government to better understand these populations and better address their needs. Such data would allow the accurate characterization of these groups and could even allow further refinement of the population categories described in this chapter. Variables that would be necessary for such characterization include data on legal documents, country of birth, length of stay in the country, refugee status (current or at some point in the past) and ethnicity. This work reflects the importance of qualitative evidence to inform other quantitative statistical products to ensure that certain often “hidden” populations, including in urban areas, are seen, surveyed, and heard to promote statistical inclusion.

Accounting for refugees who are less visible, including those living outside of refugee villages, is necessary to enable complete accounting for all residents in the country. In Djibouti, some individuals have left camps where they had access to some assistance to pursue economic opportunities in urban areas while their relatives stay in the refugee villages.

Another challenge for the decision makers is that some people living in Djibouti have no clear citizenship status and risk statelessness. To provide guidance on addressing the data gap for stateless

populations, the Expert Group on Refugee, IDP and Statelessness Statistics (EGRISS) has developed a useful framework termed the International Recommendations on Statelessness Statistics (IROSS).[12] Utilizing IROSS can enhance policy makers' and partners' understanding of the magnitude and situation of stateless groups, including LTURs. This approach aligns with the broader goal of enhancing the production of data on refugee, IDP, and stateless persons, supporting informed policy development and thereby facilitates informed decision-making by governments and the international community, ensuring that statistical inclusion is prioritized without prescribing specific policy actions.

Another implication for policy is to regularize the legal status of this population to unlock their potential, benefit Djiboutian society and help the government manage this complex migratory landscape. In terms of documentation, the analysis in this report, as well as findings of the WDR (2023), show that the lack of legal documentation is a key development challenge that Djibouti must solve. The WDR (2023) underlines the need for destination countries to define the status of the migrants, in order to allow both the host country and the migrant to benefit from the migration. Clearly, any process of regularization of legal status has strong political implications and choices involved with such decisions are difficult and potentially unpopular — dynamics which further underscore the importance of robust data systems to accurately understand the effects of policy options. Djibouti has already taken important steps to improve the inclusion of these vulnerable migrant and refugee groups in the population census and household surveys. In fact, Djibouti (INSTAD) is co-leading the Global Refugee Forum's pledge on statistical inclusion, and INSTAD has pledged to enhance the production of data on refugees, internally displaced and stateless persons through its national statistical system. Crucially, this involves including these populations in the national Population and Housing Census (RPGPH-3), whose design is informed by the EGRISS recommendations. Based on this census, the sample of the latest household budget survey (Enquête Djiboutienne auprès des Ménages pour les Indicateurs Sociaux - EDAM5) will account for migrants and refugees (including those without documentation) for the first time.

Finally, Djibouti may need to reconsider its economic model to create economic opportunities and bolster social protection for all. Indeed, Djibouti's workforce (especially among Djiboutian nationals) has very low participation and high unemployment rates. The reliance on labor from neighboring countries, particularly in low-skilled jobs (such as housekeeping, gardening and construction, among others) emphasizes the importance of this population and the necessity to manage it effectively. Indeed, global evidence (WDR, 2023) indicates that host countries benefit from migrants' contributions in the labor market, particularly when migrants' skills match the needs of the destination country, as could be the case of Djibouti.[13] Therefore, considering a growth model that generates inclusive opportunities would benefit both citizens and migrant and undocumented populations. Another way to create opportunities and synergies would be to allow refugees to live outside refugee villages where living conditions appear to be particularly difficult and without economic opportunities. Indeed, as a survival strategy, some refugee families already attempt to send one or more of their members to towns to search for work. While Djibouti has taken great strides in widening access to education for all and has active plans to widen social protection to refugees, improving access to education for the migrant and undocumented population, and including them in a social registry for formal safety nets, are crucial. Moreover, this study highlights the gap between de jure and de facto access to services. Even if the government of Djibouti made public services officially and legally accessible to all, some difficulties would still be incurred by families whose children do not have proper legal documents or Djiboutian nationality. Finally, any housing programs or slum upgrades must consider carefully the implications they may have on undocumented populations that live in informal settings and avoid displacing them further.

Conclusion

Using qualitative fieldwork to develop a typology identification is innovative and useful to further the agenda on questionnaire design (in population census and surveys) which is central to the inclusion

12 See https://egrisstats.org/recommendations/international-recommendations-on-statelessness-statistics-iross/
13 World Development Report (WDR), 2023

agenda – particularly statistical inclusion. But quantitative data remains key. This qualitative survey and analysis served to inform the National Statistical Office and partners about different population groups that typically were not considered in surveys and statistical products in Djibouti due to a lack of information and clear identification that inhibited the development of a sampling strategy. By following this qualitative study and integrating EGRISS recommendations, refugees, migrants and undocumented population have been included in the third national population and housing census (RGPH-3, 2024) as well as in the 5th household budget survey EDAM5 (Enquête Djiboutienne auprès des Ménages pour les Indicateurs Sociaux, 2025). These two quantitative data sources will provide representative and quantifiable information on this understudied population; in turn, that information can enable policy makers to develop appropriate policies for host communities and others. To this end, the Government of Djibouti and its national statistical office INSTAD recently made some efforts in advancing statistical inclusion, and they are co-leading the Global Refugee Forum's pledge on statistical inclusion where they have pledged to enhance the production of data on refugees, internally displaced, and stateless persons.

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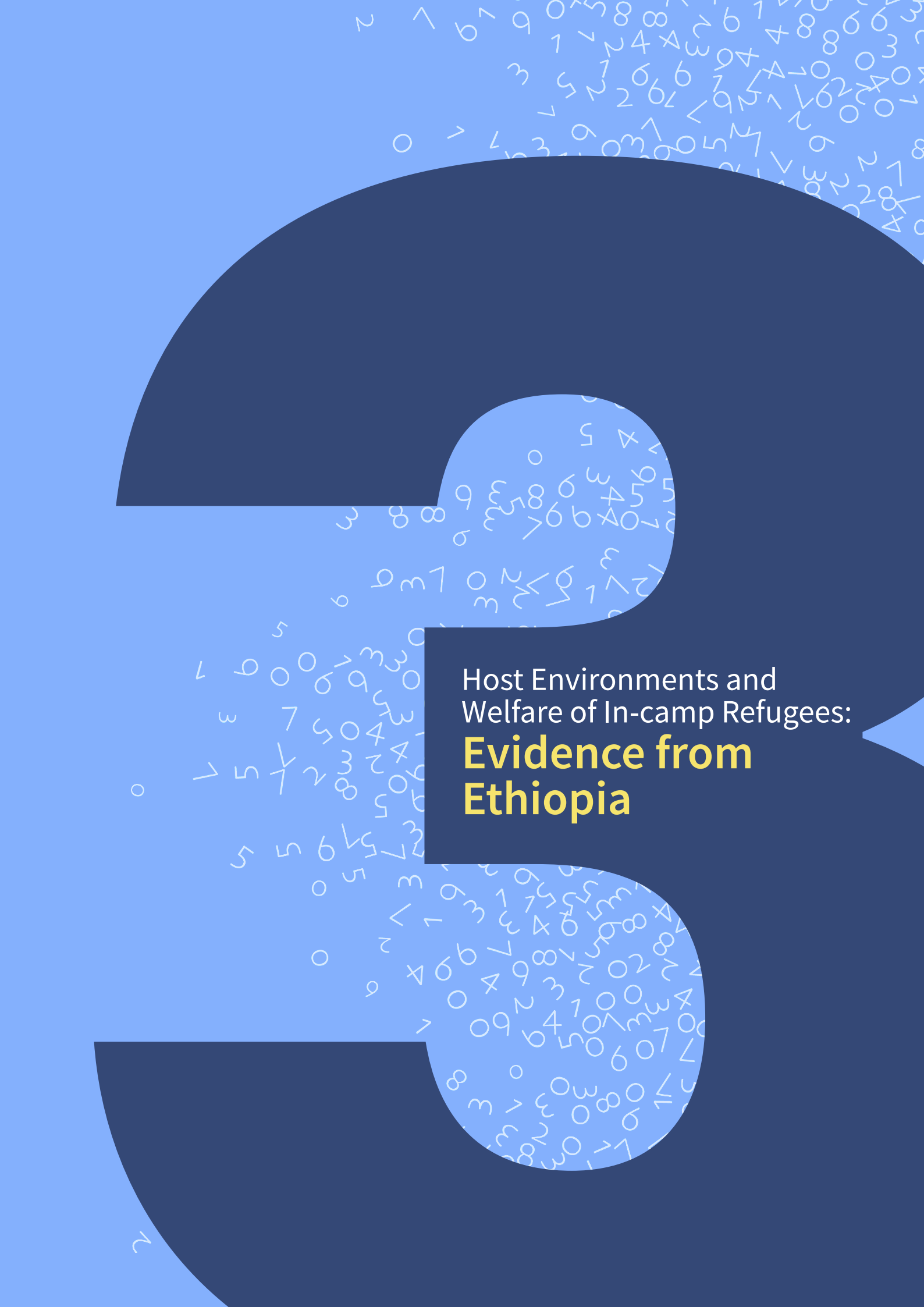
Host Environments and
Welfare of In-camp Refugees:
Evidence from
Ethiopia

CHAPTER 2.3

Host Environments and Welfare of In-camp Refugees: Evidence from Ethiopia[14]

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Abstract

This paper examines welfare disparities between in-camp refugees and host communities in Ethiopia, using data from the 2023 Socioeconomic Survey of Refugees in Ethiopia (SESRE). The analysis reveals significant welfare gaps between in-camp refugees and hosts even after accounting for various other baseline socioeconomic characteristics: in-camp refugees exhibit 60 percent lower consumption per capita and poverty rates that are 40 percentage points higher compared to host communities. These disparities are attributed to limited employment opportunities and dependence on humanitarian aid. The study also examines the impact of host community characteristics on refugee welfare, revealing that more favorable socioeconomic environments benefit refugees. Nonetheless, legal and structural barriers still block better labor market outcomes for refugees. Furthermore, the paper explores how employment outside camps may be linked to the welfare of in-camp refugees, as well as the reasons behind their pursuit of such opportunities despite restrictive policies. It finds that refugees working outside camps often originate from poorer households but report a greater sense of autonomy and control over their lives. These findings highlight the importance of economic inclusion as a pathway to self-reliance for in-camp refugees and emphasize the need to remove barriers to formal employment opportunities outside camps to improve their welfare.

Editors' Note: *In Ethiopia, the World Bank worked with the government to partner with UNHCR to develop a sampling frame based on refugee registration data. By employing a nuanced sampling strategy of refugees that accounts for country of origin and living arrangements (urban or camped), and which develops a sample of hyper-local hosts (those living within 5 miles of a camp), the resulting data can explore important dimensions of heterogeneity in welfare across subpopulations of refugees.*

14 This chapter is adapted from Masaki et al. (2025). The content has been slightly modified for inclusion in this volume.

Introduction

The fact that refugees often live many years away from their original homes has triggered a shift from a short-term humanitarian response to longer-term support for economic and social inclusion. This transition recognizes that long-term displacement creates complex socio-economic challenges for refugees. One of the key metrics to measure progress towards the self-reliance of refugees includes welfare and poverty (GCR 2023).[15] That said, refugees are often excluded from a national survey that collects data on welfare and poverty and this exclusion has hitherto limited our understanding of the socio-economic status of refugees (Denaro and Giuffr´e, 2021). This data landscape, however, has been changing in recent years – albeit gradually – with more countries now willing to collect detailed socio-economic data on displaced populations (Masaki and Madson, 2023).

Using the 2023 Socio-Economic Survey of Refugees in Ethiopia (SESRE), which offers extensive data on both refugees and host communities, this paper presents new evidence on the stark welfare disparities between in-camp refugees and hosts. One of the unique features of this survey is that SESRE stratifies the data for three groups: (i) Refugees in camps. (ii) Refugees out of camps in Addis Ababa. (iii) Host communities[16]. All require a distinct sampling procedure. The richness of this dataset allows for a detailed comparative analysis of welfare and poverty outcomes and other key socio-economic characteristics like labor outcomes across these groups. SESRE also allows us to delve into the disparities in welfare *among* in-camp refugees. Unlike other refugee surveys conducted elsewhere that sampled only from few refugee settlements in a country, SESRE covered 24 refugee camps in Ethiopia. This provides us with rich spatial variation in understanding the interplay between various host environments and the welfare of refugees.

Our findings indicate that refugees residing in camps are significantly poorer than host communities, even after controlling for other socio-economic differences and location/camp fixed effects. Welfare for in-camp refugees, measured by total consumption per capita, is 60 percent lower than that of hosts, while the poverty rate among in-camp refugees is roughly 40 percentage points higher. In-camp refugees largely depend on aid as their main source of income, and our analysis shows that this aid is insufficient to address the high levels of poverty observed in camps. Poor labor outcomes further exacerbate poverty within camps, with in-camp refugees showing lower labor force participation and employment rates compared to their host communities.

We also show that favorable host environments contribute to welfare of in-camp refugees. When host environments have a higher level of welfare, low poverty, and/or better access to services, all these favorable conditions spill over, benefiting the welfare of in-camp refugees. That said, favorable host environments have not yet been translated into improved labor outcomes for refugees due to restrictions on their rights to seek job opportunities outside camps.

Despite not having formal permits to work outside camps at the time of SESRE implementation, some still sought employment outside the camps. They did so to improve their living standards and gain a greater sense of control or autonomy. Prior studies have shown that a low sense of control over one's own fate – which is prevalent among in-camp refugees who are highly dependent on international assistance – is associated with poorer mental health or economic outcomes (Wieser et al., 2024; Hahn et al., 2019; Thum, 2014; Tsionis et al., 2024; Hussam et al., 2022). In Jordan, for instance, some refugees choose to live outside camps in search for greater autonomy and freedom (Hoogeveen and Obi, 2024). Our analysis shows that working outside camps is positively associated with in-camp refugees' perceived control over their own lives and fate.

We also show that the jobs in-camp refugees find outside the camps are not necessarily "better" than those available within the camps. In fact, in-

15 In 2018, under the IAEDG-SDGs initiative focused on data breakdown, the UNHCR and the Joint IDP Profiling Service (JIPS), as contributors to the Expert Group on Refugee and IDP Statistics (EGRIS), presented the International Recommendations on Refugee Statistics (2018). These recommendations aimed to standardize and enhance the quality of data on populations affected by forced displacement. Building on this, in December 2020, the UNHCR, JIPS, and STATS4SD pinpointed 12 key SDG indicators for which they recommended detailed analysis by displacement status, including the poverty status of refugees.

16 Host communities are defined as Ethiopian non-displaced households living in enumeration areas adja- cent to the refugee camps.

camp refugees working outside the camps are less likely to secure off-farm or formal jobs compared to those working within the camps. Since formal jobs are often provided by humanitarian organizations operating inside the camps, the lack of such opportunities in the surrounding host community further limits pathways to formal employment for in-camp refugees and perpetuates their dependence on humanitarian assistance.

This paper makes three important contributions. First, there is a notable scarcity of studies that compare welfare outcomes between refugees and hosts. This is mainly driven by the fact that comparable welfare statistics for hosts and refugees are largely absent though there are a few exceptions such as Chad (Nguyen et al., 2021), Ethiopia (Pape et al., 2018; Wieser et al., 2024) and Uganda (World Bank, 2019). Our study draws from Wieser et al.'s comprehensive socio-economic analysis of refugees in Ethiopia (2024) and extends it by delving deeper into the sources of welfare disparities between in-camp refugees and hosts through an econometric analysis. Identifying factors that drive such disparities is crucial for designing effective policies that help enhance the self-reliance of refugees.

Second, our study reveals a connection between the characteristics of host communities and the welfare of refugees, showing that favorable host environments (e.g., socio-economic conditions, host attitudes) can enhance refugee welfare. The existing literature has disproportionately focused on the impact of refugees on various socio-economic outcomes of host communities, including poverty (Ayenew, 2021), jobs (Walelign et al., 2022), commercial activity and trade (Vemuru et al., 2020), inflation (Alam et al., 2022), labor force participation (Ceritoglu et al., 2017) and host community attitude (Betts et al., 2023).[17] Much less attention has been paid to the impact of host communities on the welfare of refugees except for a few studies that looked at how host environments may play a role in shaping "refugee economies" (Alloush et al., 2017; Betts et al., 2024).

This study showcases how the welfare of refugees is interlinked with that of host communities where favorable host environments contribute to the welfare of in-camp refugees. Understanding the linkage between the welfare of refugees and their host environment is crucial for designing effective policies that foster both refugee integration and sustainable development in host communities. Refugees do not live in isolation. The well-being of refugees is deeply intertwined with the economic, social, and political conditions of their surroundings. A thriving host environment provides refugees with better access to employment, education, healthcare, and social networks, which in turn enhances their self-reliance and reduces dependency on aid. Conversely, when host communities struggle with economic stagnation or resource constraints, tensions may arise, exacerbating vulnerabilities for both refugees and local populations. By recognizing these interdependencies, policymakers, humanitarian organizations, and development agencies can implement strategies that not only improve refugee welfare but also contribute to the resilience and prosperity of host societies.

Third, it seeks to shed light on the question of why some refugees opt to seek employment opportunities outside camps despite restrictive regulatory environments. It is well documented both qualitatively and quantitatively that even under restrictive host environments where no work right for refugees is granted, refugees still seek "informal pathways" to find employment outside camps (Zetter and Ruaudel, 2018; Neikirk and Nickson, 2023). Understanding the factors that provide incentives for refugees to seek employment opportunities outside camps is crucial for several reasons. It helps policymakers design more effective strategies to support the economic integration of refugees, allowing them to become self-reliant and less dependent on humanitarian aid. Employment outside camps can also foster social cohesion by enabling refugees to contribute to local economies and interact more with host communities (Zetter and Ruaudel, 2016; Crawford et al., 2022), reducing tensions and promoting mutual understanding(Jacobsen, 2002).

17 See Verme and Schuettler (2021) for a thorough review on the impact of forced displacement on host communities.

Background

Conflict, political unrest, environmental disruption, and economic instability have led to the forced displacement of millions around the world (Ferris, 2010; Black, 2001). The count of forcibly displaced individuals has risen steadily over the past decade. As of mid-2023, there were 36.4 million refugees globally (UNHCR, 2023b). Although significant progress has been made in denting global poverty, extreme poverty is increasingly found among vulnerable groups, including refugees (World Bank, 2017). The persistently poor socio-economic conditions of the forcibly displaced presents significant hurdles to global efforts aimed at eradicating extreme poverty.

Ethiopia has a long history of hosting refugees and remains one of the largest refugee populations in Africa. The issue of forced displacement in the country is a consequence of conflict, drought, floods, economic instability, and political unrest in neighboring nations (Martin, 2010; UNHCR, 2020; IPCC, 2019). By the end of 2023, Ethiopia was hosting over 922,000 refugees and asylum seekers, mainly from South Sudan (420,000), Somalia (280,000), Eritrea (170,000), and Sudan (49,000).

The majority of refugees (92 percent) are housed in around 30 camps and sites across the Afar, Amhara, Benishangul-Gumuz, Gambella, Somali, and Tigray regions, with a notable number residing in the capital, Addis Ababa (70,000) (UNHCR, 2023a). The refugee camps are varied in location, with ethnic and linguistic connections to the host communities, and are spread across different ecological zones. For instance, about 38 percent of refugees are in arid, lowland pastoralist areas, while 60 percent are in humid, agriculturally viable lowland regions (Wieser et al., 2024).

Ethiopia has taken considerable strides in developing a more advanced and inclusive approach to refugee response. The country has ratified the 1951 UN Convention on the Status of Refugees and its 1967 Protocol, thereby committing to the protection of refugees and asylum seekers. The Ethiopian government has notably reformed its refugee policies since 2016, moving away from a policy of encampment to one that emphasizes socio-economic integration. A series of national laws and policies have been implemented to safeguard refugees and uphold their rights. The cornerstone of these legal measures is the Refugee Proclamation, established in 2004, which outlines the principles for refugee protection and administration in the country. In 2017, Ethiopia distinguished itself by being the first nation to implement the Comprehensive Refugee Response Framework (CRRF), an international blueprint for addressing refugee crises. Following its support for the Global Compact on Refugees (GCR) in 2018, Ethiopia further reinforced its dedication to refugee welfare with the introduction of a revised and forward-thinking Refugee Proclamation in January 2019.

The Ethiopian government introduced the Out-of-Camp Policy (OCP) in 2010, allowing refugees to reside in Addis Ababa and other non-camp areas, expanding opportunities for self-reliance. In 2019, a Directive enabled refugees to apply for OCP residency permits after one month in a camp, provided they can support themselves or have a sponsor and receive a work permit. Special exemptions are also available for vulnerable groups. After the conflict in Tigray in November 2020, many Eritrean refugees relocated to Addis Ababa, with differences in demographics and health outcomes observed between those who arrived before and after the conflict.

Most recently, Ethiopia introduced Directive No. 1019/2024[18], based on the 2019 Refugee Proclamation, to grant recognized refugees and asylum seekers the right to work in wage employment, commercial activities, agriculture, manufacturing, and services across urban and rural areas. The Directive aims to foster self-reliance and integration, helping refugees become productive members of Ethiopian society.

Despite these progressive legal and policy measures, many refugees in Ethiopia continue to experience poverty and remain heavily reliant on humanitarian aid (Wieser et al., 2024). Ethiopia's policy measures have not effectively materialized into concrete socio-economic benefits for the refugee population. Predominantly, refugees are

18 Ethiopia: Directive No. 1019/2024 to Implement Recognized Refugees' and Asylum Seekers' Right to Work, No. 1019/2024, 14 August 2024 (https://www.refworld.org/legal/decreees/natlegbod/2024/en/148630).

confined to camps, with a minimal fraction gaining from the progressive policy environment. Formal employment opportunities are limited, and only a few refugees in camps manage to find stable work. For instance, South Sudanese refugees often engage in collecting grass for sale, brewing local alcohol, or selling goods from their rations (Vemuru et al., 2020). Somalia refugees, in addition to employment through humanitarian NGOs, international organizations, or Ethiopia's Refugees and Returnees Service (RRS, formerly Agency for Refugee and Returnee Affairs), are typically involved in agriculture, livestock rearing, and small-scale commerce (Betts et al., 2019). Eritrean refugees commonly take up casual construction work or self-employment in small businesses, while Sudanese refugees participate in artisanal gold mining and daily farm labor (Vemuru et al., 2020). The sluggish enactment of these policies impedes refugees' ability to move in search of improved economic opportunities or to secure access to land, financial services, or the necessary work permits to engage in employment outside the camp settings.

Data

Our analysis draws on data from SESRE, conducted between November 2022 and January 2023. SESRE aimed to address two key issues: (i) a lack of data on the socio-economic conditions of refugees, and (ii) a shortage of analytical studies comparing the socio-economic outcomes of refugees and host communities (Table 8). The absence of up-to-date information hinders effective policies for addressing various socio-economic challenges faced by both groups. SESRE helps assess social dynamics, socio-economic interactions, and social inclusion, providing essential insights for governments and development partners to improve refugee integration and the welfare of both refugees and their host communities.

SESRE focuses on three distinct groups, each requiring a unique sampling strategy: refugees in camps, refugees out-of-camp, and host communities:

- **Refugees in Camps:** Using UNHCR's proGRES database, refugee camps were divided into three domains based on refugees' country of origin (South Sudan, Somalia, Eritrea). Camps were broken into enumeration areas (EAs) of 150-200 households each for sampling.
- **Refugees in Addis Ababa:** Due to the challenges of locating refugees in urban areas, the sampling used UNHCR's data, sorted by location. Pseudo-EAs were created based on Woreda and sub-city boundaries. Refugees were stratified based on whether they arrived before or after the Tigray conflict in November 2020.
- **Host Communities:** Host communities were defined as those living within 5 km of a refugee camp. Sampling used Ethiopia's 2018 cartographic database, with EAs in both rural and urban areas as the primary sampling unit.

This approach ensured that data collection captured the diverse experiences of refugees and their host communities. The final sample consists of 1,296 in-camp refugee households, 431 out-of-camp refugee households and 1,725 host households. Since our focus is on understanding the factors associated with the welfare of in-camp refugees compared to their hosts, out-of-camp refugees in Addis Ababa are excluded from the analysis.

SESRE encompasses all major refugee camps, including those for Eritreans, South Sudanese, and Somalis, as well as out-of-camp refugees in Addis Ababa and the corresponding host communities. Eritrean refugees in Tigray were excluded due to the conflict between 2020 and 2022, but those in Afar and those who moved to the newly established Alemwach refugee site were included. The survey also sampled Eritrean refugees who moved to Alemwach after the conflict and those who arrived in Addis Ababa post-November 2020.

Models

We first assess how welfare may vary depending on the displacement status of households and individuals. To do so, we estimate the following fixed-effects model:

$$y_{ic} = \alpha_c + \gamma Refugeeic + \beta X_{ic} + \epsilon_{ic} \qquad (1)$$

where y_{ic} is the dependent variable representing welfare outcomes (e.g., consumption per capita (log), extreme poverty) for household *i* in camp *c* (or

in the host community near camp c). αc represents the location-specific fixed effect, *Refugeeic* is a binary variable indicating whether the household is an in-camp refugee, X_{ic} is a vector of household-level covariates (such as household size, age, literacy, and access to services), and ϵ_{ic} is the error term.

TABLE 8: Descriptive statistics

Household-level	Host Communities			In-camp refugees		
Variables	**No. of HHs**	**Mean**	**Std. Dev.**	**No. of HHs**	**Mean**	**Std. Dev.**
Total consumption (pc)	1,718	36,535	25,953	1,287	14,052	8,741
Poverty (USD2.15 per day)	1,718	0.249	0.432	1287	0.837	0.369
Rely on aid	1,718	0.007	0.083	1,287	0.779	0.415
Access to public services (index)	1,718	0.780	1.371	1,287	-0.411	0.788
Arrived before 2000	0			1,269	0.040	0.196
Arrived between 2000-2009	0			1,269	0.749	0.434
Arrived between 2010-2019	0			1,269	0.209	0.407
Arrived between 2020-2022	0			1,269	0.002	0.043
Control Index (internal)	1,718	2.931	0.707	1,287	2.654	0.833
Control Index (chance)	1,718	1.741	0.821	1,287	1.649	0.829
Control index (others)	1,718	1.509	1.100	1,287	1.694	1.141
Host attitudes (index)	1,718	2.799	0.403	0		
Individual-level	**Host Communities**			**Refugees**		
Variables	**No. of HHs**	**Mean**	**Std. Dev.**	**No. of HHs**	**Mean**	**Std. Dev.**
Age 15-29	8,165	0.132	0.338	7,357	0.166	0.372
Age 30-44	8,165	0.476	0.499	7,357	0.552	0.497
Age 45-64	8,165	0.288	0.453	7,357	0.252	0.434
Age above or equal 65	8,165	0.104	0.305	7,357	0.030	0.172
Literacy (read and write)	7,469	0.764	0.425	6,662	0.607	0.488
Work outside camp	0			1028	0.402	0.490
Labor force participation	4,385	0.599	0.490	3,502	0.311	0.463
Employed (past 12 months)	4,385	0.562	0.496	3,502	0.290	0.454
Formal employment (past 12 months)	2,367	0.602	0.490	1,028	0.277	0.448
Off-farm employment (past 12 months)	2,385	0.858	0.350	1,039	0.823	0.382
Monthly wage (log)	893	8.425	0.860	249	7.327	0.781

Note: Poverty is measured based on households living under the international poverty line of USD2.15 per day. Access to services measured based on the composite index of access to electricity, improved water and improved sanitation. The access to public services index was calculated using a weighted-average, with weights derived from principal component analysis. This control index is the unweighted average of 10 questions about feelings of control over one's fate. The index ranges from 0 to 4, where more positive indicates greater control. The internal control index uses four questions regarding personal control over destiny. The chance index uses five questions regarding the role of chance or determinism. The role of the powerful others index is 1 question on whether others determine fate. Host attitudes towards refugees are measured based on the Attitudes Index – the average of 10 questions regarding beliefs about refugees' character, the rights they should receive, and their impact on the host community, standardized to a mean of 0 and SD of 1, where positive indicates better attitudes.

Accounting for camp fixed effects is crucial when comparing refugees and host communities because it controls for location-specific characteristics that could influence both welfare outcomes and other underlying socio-economic characteristics of refugees and hosts. Each camp or host area might have unique factors, such as access to resources, infrastructure, or local policies, that affect both refugees and hosts differently. By incorporating fixed effects, the analysis isolates the impact of refugee status on welfare, ensuring that comparisons between refugees and hosts are not skewed by variations in conditions across different camps or regions.

Applying this same model, we also test how refugee status may be correlated with other key "intermediate" outcome variables that are also closely linked to welfare. Namely, we evaluate how refugee status may be associated with labor outcomes (e.g., labor force participation, employment) as well as main sources of income. In so doing, we seek to shed light on key factors that explain variation in welfare outcomes between refugees and hosts.

We further investigate the factors that drive variations in welfare specifically among in-camp refugees. Previous research, both qualitative and quantitative, has highlighted how household characteristics – including household size, education level, access to services – may affect welfare disparities among in-camp refugees. In addition, host environments may also play a significant role. To pinpoint the key household and host environmental factors influencing welfare disparities among refugees, we estimate the following models:

$$y_{ic} = \alpha + \delta Host\ Characteristics_c + \beta X_{ic} + \epsilon_{ic} \qquad (2)$$

where y_{ic} is the dependent variable for refugee household *i* in camp *c*, Host Characteristicsc represents the socio-economic characteristics of host communities in and around camp *c*. We consider three key host characteristics: average values of y_{ic} among nearby host communities, access to markets, and host attitudes towards refugees. For example, when the dependent variable is household consumption, we compute the mean of that among host households living in or near camp c and include it as one of the predictors. To measure access to markets, we compute travel time from host households to the nearest urban agglomeration using data on urban agglomerations from GRID3 human settlement data[19] and the friction map provided by Weiss (2018) and Weiss et al. (2018). Host attitudes towards refugees is measured based on the Attitudes Index – the average of 10 questions regarding beliefs about refugees' character, the rights they should receive, and their impact on the host community, standardized to a mean of 0 and SD of 1, where positive indicates better attitudes. This model allows us to assess how the socio-economic environment and attitudes of the host community impact the welfare of refugees. Lastly, X_{ic} represents a set of control variables at the individual or household level, such as age, literacy, household size, and years of arrival. Host community characteristics are expected to play a significant role in determining refugee welfare. For instance, refugees in communities with higher levels of economic development and more positive attitudes towards refugees may experience better welfare outcomes due to increased access to services and employment opportunities. Conversely, refugees in less favorable environments may struggle to achieve economic self-reliance and improve their welfare.

We then estimate a model to assess the relationship between working outside the camp and the welfare of in-camp refugees:

$$y_{ic} = \alpha_c + \vartheta Work\ Outside\ Campic + \beta X_{ic} + \epsilon_{ic} \qquad (3)$$

In this equation, *yic* represents the welfare outcome of refugee household or individual *i* in camp *c*. The term *αc* is a camp-specific fixed effect, capturing unobserved factors that vary across camps. The variable Work Outside Campic is a binary indicator, equal to 1 if the refugee household or individual works outside the camp and *0* otherwise. X_{ic} includes household- or individual-specific characteristics as defined in Equation 2. This model is designed to help us understand how employment outside the camp influences various welfare and labor outcomes as well as the individual's sense of control over their life. Working outside the camp can provide refugees with access to a wider range

19 Available from https://data.grid3.org/datasets/GRID3::grid3-eth-settlement-extents-v3-0/about.

of employment opportunities, potentially leading to higher wages and improved welfare. In addition to the financial benefits, engaging in work outside the camp may enhance a refugee's sense of autonomy and empowerment, both of which are important components of overall well-being. However, it is essential to recognize that working outside the camp may also expose refugees to a range of risks. These risks can include exploitation in informal labor markets, discrimination based on their refugee status, and challenges in navigating legal and social systems that may not fully protect their rights. Furthermore, commuting to work outside the camp may involve transportation costs and safety concerns, which could offset some of the potential benefits.

Lastly, we delve into the socio-economic profile of those refugees who choose to work outside camps. To this end, we estimate the following Linear Probability Model:

$$y_{ic} = \alpha + \beta X_{ic} + \delta Host\ Characteristics_{c} + \epsilon_{ic} \qquad (4)$$

where *yic* takes on the value of one if individual *i* works outside camps, and zero otherwise. X_{ic} represents a set of key individual characteristics (i.e., age, gender, literacy) as well as household-level features (i.e., per capita consumption (log), access to services as well as presence of other workers in the same family). Host Characteristicsc capture the characteristics of host environments – namely, access to market (measured by travel time to cities) and host attitudes towards refugees.

By incorporating these considerations into the analysis, we aim to provide a comprehensive understanding of how working outside the camp may impact refugee welfare and what socio-economic factors drive refugees' decisions to seek employment outside camps despite the regulatory restrictions.

Results

Baseline differences in welfare: hosts and in-camp refugees

The analysis reveals significant differences in welfare between in-camp refugees and host communities. Even after controlling for baseline socio-economic characteristics and location-specific fixed effects, refugees in camps are found to be far poorer than their host counterparts (see Figure 9). Specifically, the welfare of in-camp refugees, as measured by total consumption per capita (log), is approximately 60 percent lower than that of hosts. Moreover, the poverty rate for in-camp refugees is roughly 40 percentage points higher than that of host communities.

One major factor that drives this disparity between in-camp refugees and hosts is limited employment opportunities among in-camp refugees. Both labor force participation and employment rate are significantly lower among in-camp refugees compared to hosts. Instead, in-camp refugees rely mostly on international aid to compensate for a lack of income coming from employment. While the stark welfare gap between in-camp refugees and host communities is primarily driven by limited employment opportunities, it is important to consider the broader implications of what could be described as "trapped poverty" (Malevolti and Romano, 2024). In-camp refugees are often placed in highly controlled environments with restricted access to labor markets, movement, and opportunities for economic advancement. Prolonged humanitarian aid, while essential for meeting refugees' immediate needs, can also inadvertently trap them in poverty by fostering dependency and limiting opportunities for self-reliance. When aid is provided as a long-term substitute for employment rather than a complement to economic inclusion, refugees may struggle to develop skills, build professional networks, or access formal labor markets (Carpi, 2019). Restrictions on movement, work permits, and economic participation in many host countries further exacerbate this issue, forcing refugees to rely on diminishing aid rather than pursuing sustainable livelihoods.

Heterogeneity in welfare among in-camp refugees

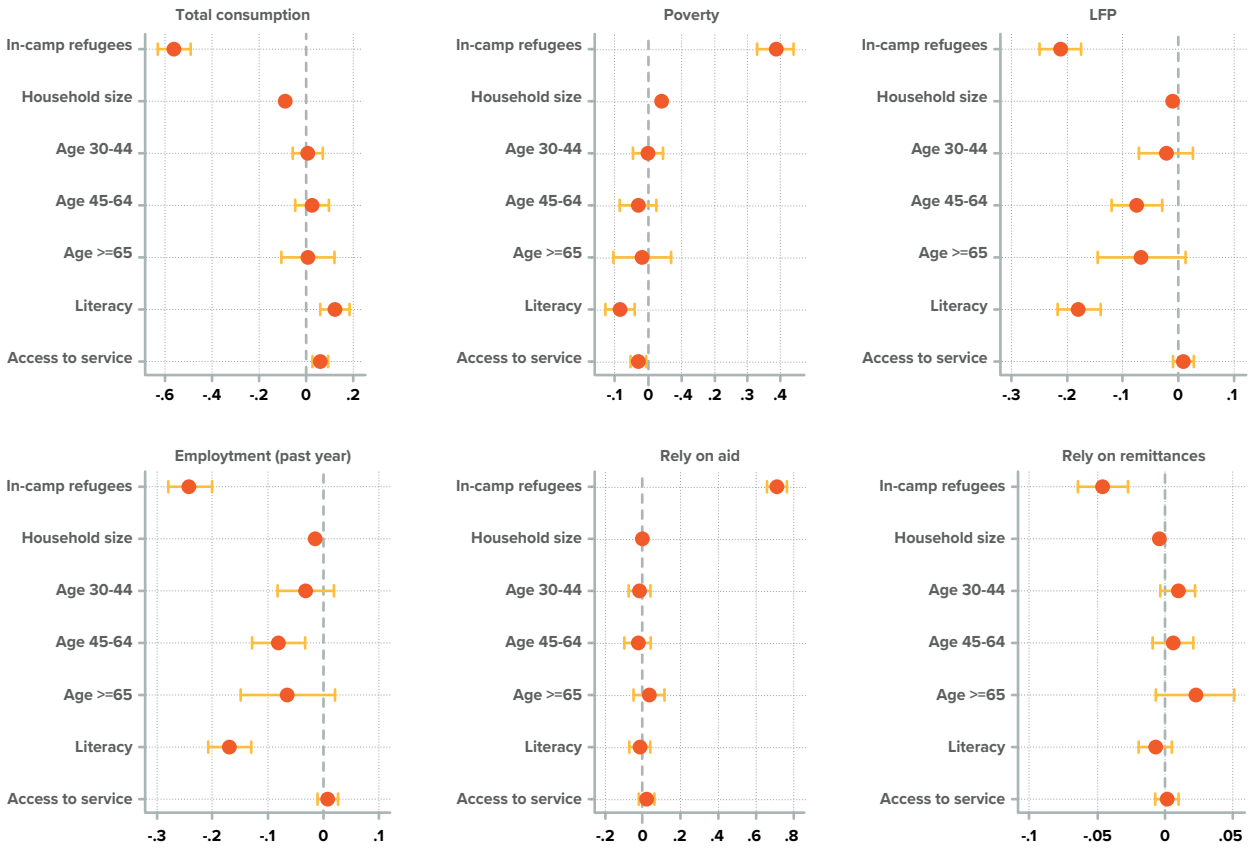
The analysis also reveals that the welfare of in-camp refugees is closely linked to the characteristics of the host communities where they are settled. No refugee camp, regardless of its location, is completely sealed off from the movement of goods, capital, and people

from the outside (Betts et al., 2016; Werker, 2007). Our results show that, not surprisingly, refugees tend to experience better welfare outcomes when they are hosted in communities with more favorable socio-economic conditions and positive attitudes toward refugees.

Our findings (Table 9) indicate a positive correlation between the welfare of host communities and that of refugees. The socio-economic environment of the host community plays a pivotal role in shaping refugee welfare. Overall, host communities with higher levels of welfare and better infrastructure (e.g., electricity, access to improved water and sanitation) are associated positively with better outcomes for refugees. These resources are vital not only for improving immediate welfare outcomes but also for supporting long-term integration and self-reliance. In contrast, refugees residing in economically disadvantaged communities may face significant barriers in accessing even the most basic services, which can perpetuate cycles of poverty and further marginalize them from the economic and social life of the host country (Pape et al., 2018).

Social cohesion plays a crucial role in the economic integration of refugees, as the attitudes of host communities can significantly impact refugees' opportunities for employment, entrepreneurship, and overall economic well-being. Our findings indeed show that positive attitudes of hosts towards refugees are associated positively with their welfare. When host communities have positive perceptions of refugees and view them as contributors rather than competitors, refugees are more likely to access labor markets, establish business networks, and participate in the local economy (UNHCR, 2024; De Vroome and Van Tubergen, 2010). In contrast, when refugees are perceived as economic threats, they may face exclusionary practices, discrimination, or restrictions on accessing jobs, land, and essential social services (Şeker, 2023). Such negative perceptions not only hinder refugees' ability to achieve self-reliance but

FIGURE 9: Regression outcomes: Baseline



Note: The figure shows the regression coefficients with the 95% confidence intervals. All these regressions control for location/camp fixed effects.

TABLE 9: Welfare regression among in-camp refugees

	Welfare		Public services			Labor outcomes			
Dependent Variable	**Consumption (1)**	**Poverty (2)**	**Electricity (3)**	**Improved Water (4)**	**Improved Sanitation (5)**	**LFP (6)**	**Employed (7)**	**Off-farm emp. (8)**	**Earning (log) (9)**
Host outcome	0.363*	0.231*	0.202*	0.268*	0.776*	0.065	0.314	-0.075	-0.029
	(0.104)	(0.082)	(0.084)	(0.11)	(0.182)	(0.173)	(0.189)	(0.148)	(0.312)
Travel time to city	-0.034	0.041*	0.014	-0.005	0.033	-0.017	-0.023	-0.054*	-0.077
	(0.02)	(0.017)	(0.018)	(0.006)	(0.018)	(0.013)	(0.013)	(0.016)	(0.044)
Host attitudes	0.186*	-0.092	0.026	-0.029	-0.074	0.026	0.045	-0.163	0.082
	(0.073)	(0.048)	(0.015)	(0.063)	(0.101)	(0.052)	(0.057)	(0.103)	(0.239)
Household size	-0.085*	0.042*	0	-0.004	0.007	-0.005	-0.007	-0.003	0.027
	(0.007)	(0.006)	(0.001)	(0.004)	(0.007)	(0.005)	(0.004)	(0.006)	(0.021)
Literacy	0.118*	-0.084*	-0.015	-0.026	0.005	-0.216*	-0.198*	0.043	0.092
	(0.038)	(0.027)	(0.012)	(0.026)	(0.041)	(0.021)	(0.022)	(0.033)	(0.106)
No. of Obs.	**1,269**	**1,269**	**1,269**	**1,269**	**1,269**	**3,351**	**3,351**	**1,013**	**243**

Note: All regressions control for age and years of arrival. In this table, host outcome refers to the average values of y_{ic} among nearby host communities (see Equation 2). For example, when the dependent variable is household consumption (Model 1), we compute the mean of that among host households living in or near camp c and include it as one of the predictors. In these regressions, camp-fixed effects are not included because doing so would not allow us to include host environment characteristics as a covariate. Standard errors clustered at the EA level. * denotes statistical significance at the 0.05 level.

also exacerbate social tensions, weakening trust and cooperation between refugees and hosts. A lack of social cohesion can disrupt commercial linkages, reduce market efficiencies, and ultimately create economic stagnation for both groups (Betts et al., 2023, 2016). Therefore, fostering inclusive policies and community engagement initiatives that promote social cohesion is essential for ensuring that refugees can contribute productively to the host economy while also strengthening economic resilience and social stability in host communities.

Additionally, the overall resilience of the host community's economy can influence how well both refugees and hosts cope with external shocks, such as economic downturns or environmental crises. In more economically stable areas, refugees may find it easier to establish livelihoods and contribute to the local economy, which can create a virtuous cycle of mutual benefit. Therefore, policies that aim to improve the welfare of refugees must also consider the broader development needs of host communities, recognizing that the well-being of both groups is often interdependent (Vemuru et al., 2020; Betts et al., 2022; Walelign et al., 2022).

That said, it is worth highlighting that host environments do not appear to improve labor outcomes for refugees. Indeed, our analysis shows no strong correlation between labor outcomes in host communities and those for in-camp refugees. This finding applies to various labor outcomes, including labor force participation, employment rates, off-farm employment, and wages. However, it underscores the importance of easing restrictions on refugees' rights to work outside camps – as was recently introduced in Ethiopia – because these restrictions may limit their ability to access better labor opportunities and integrate into local economies. Allowing refugees to work freely in host communities can not only improve their economic outcomes but also contribute to local development, creating a mutually beneficial situation for both refugees and their hosts.

On a related note, the relationship between refugees and host communities need not be unidirectional. Refugees, when given access to economic opportunities, can positively contribute to local economies by filling labor shortages, creating businesses, and generating demand for goods and services (Evans and Fitzgerald, 2017; Loschmann et al., 2019; Sanghi et al., 2016). In many settings, refugees have introduced new skills, entrepreneurial ventures, and labor force participation that strengthen local economies rather than burden them. For example, studies have shown that refugee-led businesses and enterprises can

create jobs not only for other refugees but also for local residents, fostering economic spillovers that benefit the host population. Additionally, international aid directed toward refugees may also stimulate the local economy, as financial assistance and relief efforts increase the flow of resources, benefiting host communities indirectly through job creation and infrastructure development (Zhou et al., 2023).

Employment outside camps

A significant proportion of in-camp refugees seek employment outside the camps despite not having work permits at the time. About 40 percent of in-camp refugees who worked during the last 12 months indicated that they worked outside the camps. This section delves into whether refugees seeking out-of-camp jobs would reap any welfare premiums compared to those working within camps.

In-camp refugees with a job outside camps do not appear to reap any noticeable welfare premiums (Table 10). In fact, working outside camps is associated with lower household welfare. Furthermore, refugees working outside camps are less likely to work in off-farm or formal employment compared to those working inside camps, and agriculture and informal jobs are often associated with lower household welfare and higher poverty (Kaiser, 2006; Ruiz and Vargas-Silva, 2015). Given that international humanitarian NGOs provide many formal jobs within camps – accounting for 46 percent of formal jobs – limited formal employment opportunities in surrounding host communities present a challenge to those in-camp refugees who would need more productive jobs to enhance their living standards. That said, the wages of refugees working outside camps were roughly 36 percent higher than wages earned by refugees working inside camps—though the 78 refugees working outside camps in the sample account for only a small fraction of the full sample of 1,028 refugee workers.

Despite not offering any clear welfare benefits, however, working outside camps is positively associated with a stronger sense of autonomy and self-determination, which are crucial elements of well-being. This enhanced sense of control over their circumstances is a vital component of overall welfare. Prior research also shows that refugees in camps, who depend heavily on international aid, often experience a lower sense of control, which is linked to poorer mental health and economic outcomes (Wieser et al., 2024; Hahn et al., 2019; Thum, 2014; Tsionis et al., 2024; Hoogeveen and Obi, 2024; Hussam et al., 2022). However, working outside the camps can expose refugees to significant risks, including exploitation, discrimination, and potential legal consequences, especially when they do not have the necessary documentation to work legally. In the absence of work permits, refugees are often susceptible to unfair labor practices, reduced wages, and poor working conditions, with limited access to legal protections. In addition to these legal and safety risks, refugees working outside the camps may also struggle to balance work with other responsibilities, such as caring for family members or managing obligations within the camp. The need to travel long distances for work or live separately from their families can introduce additional stress and logistical challenges, further complicating their efforts to maintain a stable life.

Overall, refugees who choose to work outside camps tend to have lower socio-economic profiles. The regression results in Table 11 provide insights into the socio-economic factors influencing refugees' decisions to work outside camps. The coefficients for gender, literacy, and total consumption are statistically significant across all four models, indicating a strong association with refugees' decisions to work outside camps. Female refugees are less likely to engage in such employment, as reflected by consistently negative coefficients, particularly in Model 4. Literacy also shows a negative relationship with the probability of working outside camps. Similarly, lower levels of total consumption are linked to a higher likelihood of seeking employment beyond camp boundaries. In contrast, other household and location-level variables—such as access to services, the presence of other workers in the household, travel time, and host community attitudes—do not exhibit significant associations.

TABLE 10: Regression results on out-of-camp employment and refugee welfare and well-being

	Welfare		Labor outcomes			Control index		
Dependent Variable	**Consumption (1)**	**Poverty (2)**	**Off-farm emp. (3)**	**Formal emp. (4)**	**Earning (log) (5)**	**Internal (6)**	**Chance/Fate others (7)**	**Powerful (8)**
Work outside camp	-0.087*	0.045	-0.222*	-0.084*	0.363*	0.132*	-0.17	-0.205*
	(0.035)	(0.027)	(0.048)	(0.037)	(0.136)	(0.06)	(0.135)	(0.086)
Household size	-0.084*	0.04*	0.001	-0.004	0.014	-0.014	0.064*	0.019
	(0.009)	(0.01)	(0.004)	(0.005)	(0.019)	(0.014)	(0.027)	(0.015)
Literacy	0.086	-0.058	0.035	0.097*	0.253*	0.042	-0.07	0.054
	(0.047)	(0.037)	(0.032)	(0.032)	(0.102)	(0.084)	(0.097)	(0.09)
Access to services	0.089*	-0.018	0.019	0.016	0.02	-0.036	0.124	0.087
	(0.025)	(0.023)	(0.026)	(0.028)	(0.082)	(0.065)	(0.085)	(0.066)
No. of Obs.	**596**	**596**	**1,002**	**1,002**	**243**	**596**	**596**	**596**

Note: All regressions include controls for age and years of arrival as well as camp-fixed effects. Standard errors clustered at the EA level. Note that the sample here is only limited to those who indicated working in the past 12 months. * denotes statistical significance at the 0.05 level.

TABLE 11: Regression results on the socio-economic profile of refugees working outside camps

Model	**(1)**	**(2)**	**(3)**	**(4)**
Female	-0.149*	-0.163*	-0.163*	-0.179*
	(0.052)	(0.052)	(0.05)	(0.049)
Literacy	-0.113*	-0.105*	-0.108*	-0.135*
	(0.036)	(0.038)	(0.039)	(0.042)
Total consumption		-0.078*	-0.063	-0.087*
		(0.037)	(0.04)	(0.042)
Access to services		-0.006	0	-0.013
		(0.025)	(0.029)	(0.027)
Other worker in the same household		0.007	0.01	0.003
		(0.055)	(0.056)	(0.057)
Travel time to city			0.021	
			(0.02)	
Host attitudes			-0.021	
			(0.112)	
No. of Obs.	**243**	**596**	**596**	**596**
Household-level characteristics	No	Yes	Yes	Yes
Camp-level characteristics	No	No	Yes	No
Camp-fixed effects	No	No	No	Yes

Note: All regressions include controls for age and years of arrival. Model 4 includes camp-fixed effects. Standard errors clustered at the EA level. Note that the sample here is only limited to those who indicated working in the past 12 months. * denotes statistical significance at the 0.05 level.

Conclusion

In conclusion, this study offers a comprehensive analysis of welfare disparities between refugees and host communities in Ethiopia, drawing on data from SESRE. The findings highlight significant welfare gaps, with refugees – particularly those in camps – experiencing severe economic disadvantages. These disparities are largely driven by restricted access to employment opportunities, which perpetuates dependence on aid and hinders refugees' paths toward self-reliance and economic integration.

To improve refugee welfare and support economic integration, it is essential to expand both de jure (legal) and de facto access to employment opportunities for refugees. Allowing refugees to work outside camps can foster self-reliance, reduce aid dependency, and stimulate local economic growth. Developing formal employment avenues will also protect refugees from the risks associated with informal labor markets. Together, these initiatives provide a foundation for sustainable livelihoods and economic inclusion. In this respect, Ethiopia's recent Directive to operationalize the legal rights to work for refugees in Ethiopia is an important step towards self-reliance of refugees in the country.

Yet, whether the new Directive for refugees to seek employment in Ethiopia is a significant step forward towards improving welfare, not only for the refugees themselves but also for the host communities, remains to be seen. This Directive is crucial as it provides a legal framework that enables refugees to transition from aid dependency to self-reliance, fostering their integration into the national economy. By addressing structural issues such as lack of or informal employment, the Directive aims to create a more inclusive and sustainable economic environment. This policy shift aligns with Ethiopia's commitment to inclusive development and recognizes that work permits alone are insufficient for positive welfare outcomes unless accompanied by measures to tackle underlying employment challenges. While the Directive offers hope for overcoming previous implementation gaps, its full impact remains to be seen. The success of Ethiopia's model will depend on the effective execution of this Directive and the creation of economic opportunities that allow refugees to contribute meaningfully to their host communities, thereby benefiting both refugees and the broader society.

Our study further indicates that many in-camp refugees seek employment outside camps out of urgent need to escape poverty and gain more autonomy. However, off-farm or formal job opportunities within host communities remain limited, and there is no evidence that households with members working outside camps fare better in terms of welfare than those working within camps. Those refugees who work outside camps often come from poorer households and have lower levels of education. Addressing this requires policies that allow refugees the freedom to move to areas with higher economic potential, which could enhance job prospects, increase local demand, and contribute to rural transformation—an essential step for Ethiopia's structural development. In this context, area-based policy interventions for refugees and their hosts are essential for fostering social cohesion and economic development in regions affected by forced displacement to ensure that the benefits of such policies are equitably distributed (Schell et al., 2020).

Lastly, the study underscores the significant impact of host community characteristics on refugee welfare. Refugees benefit more when host communities have favorable socio-economic conditions and positive attitudes toward them. Strengthening social and economic interactions between refugees and hosts can create mutual benefits, foster social cohesion and enable positive spillovers from infrastructure investments. Although poverty levels in host communities are generally lower than among in-camp refugees, these communities still face persistent poverty and inadequate access to essential public services. Addressing these needs through targeted investments can yield long-term benefits for both refugees and hosts, supporting more inclusive and resilient communities.

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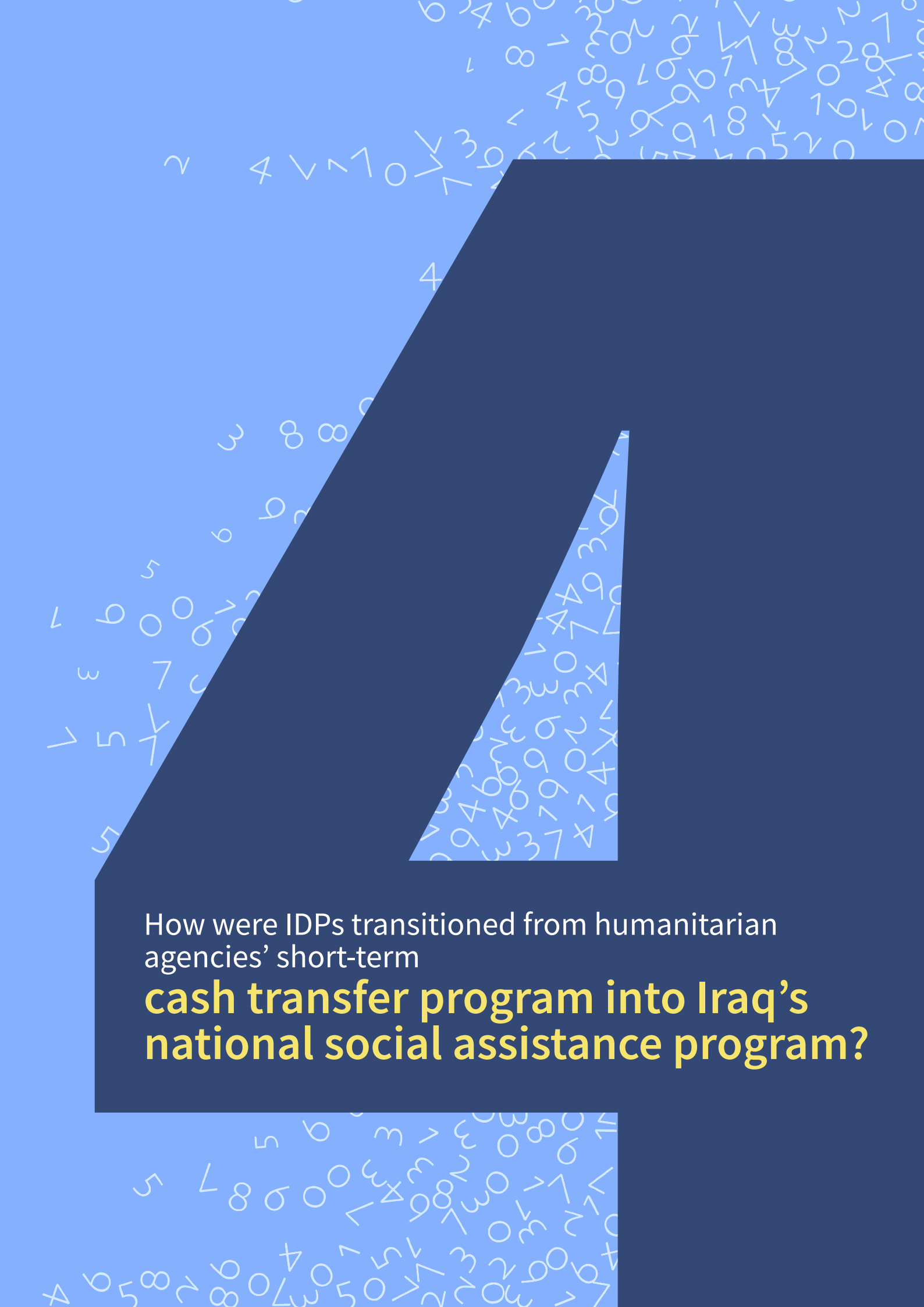

How were IDPs transitioned from humanitarian agencies' short-term

cash transfer program into Iraq's national social assistance program?

CHAPTER 2.4

How were IDPs transitioned from humanitarian agencies' short-term cash transfer program into Iraq's national social assistance program?[20]

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Abstract

The transition of internally displaced persons (IDPs) from a short-term humanitarian cash transfer program to a national social assistance program in Iraq was sparked by the displacement of over 6 million people due to the conflict with ISIS. Initially supported by NGOs, UNHCR, and WFP, displaced populations faced challenges in accessing social protection due to lack of civil documentation and complicated registration procedures. In response, the Iraq Cash Working Group coordinated the Multi-Purpose Cash Assistance (MPCA) response, which reached over 1 million households. To ensure a sustainable shift to Iraq's national social protection system, stakeholders, including the Government of Iraq and international bodies, initiated a dialogue to explore alignment strategies between humanitarian cash assistance and the Ministry of Labor and Social Affairs' (MoLSA) Social Protection Network (SPN).

The methodology to align the different assistance programs involved estimating the share of humanitarian cases eligible for MoLSA's national cash transfer program using a pseudo-PMT (PPMT) model. This model bridged the targeting models of the two programs by using common proxy indicators to estimate household welfare levels. The analysis indicated that a significant portion of the humanitarian database could be referred to MoLSA's program with varying confidence levels. The results suggested a phased referral strategy, starting with high-likelihood referrals and expanding with budget feasibility to manage verification burdens and expectations. This approach aimed to integrate the neediest cases into the national system while adjusting the targeting threshold to accommodate more households over time.

Editors' Note: *The Iraq case provides a powerful demonstration effect for the ability to leverage data collected through national systems to develop both a sample frame and an imputation framework to inform welfare of internally displaced populations. By using the SWIFT imputation approach, the resulting analytics can illuminate welfare disparities in a way that is less costly than would have been possible otherwise with a similar degree of statistical precision.*

20 The original work was supported by the Iraq Reform, Recovery, and Reconstruction Fund (I3RF) trust fund. The authors thank the PROSPECTS Partnership Programme, funded through the World Bank-administered Multi-Donor Trust Fund for Forced Displacement, for its financial support and encouragement.

Policy question – how were IDPs transitioned from humanitarian agencies' short-term cash transfer program into Iraq's national social assistance program?

Due to the conflict with ISIS, over 6 million people, or about 15 percent of the population of Iraq, were displaced after 2014 (IOM Iraq, 2020a). While 78 percent of those who were displaced returned to their areas of origin (IOM Iraq, 2020b), many returnees found their homes destroyed or damaged, with unexploded ordinances, absence of livelihoods and services, lack of social cohesion (community tensions and fears of population change) and security concerns (blocked return or perceived insecurity). Cash transfers have been used in Iraq since 2014 by NGOs, UNHCR, and WFP to support conflict-affected and displaced populations. These populations were initially comprised of Syrian refugees, and subsequently, of internally displaced populations as well. The Ministry of Migration and Displaced (MoMD) also provided some support, but access to social protection remained a challenge for both the displaced and returnees due to lack of civil documentation, inadequate assessment capacity of authorities, and complicated registration procedures. The Iraq Cash Working Group was formed to coordinate the growing Multi-Purpose Cash Assistance (MPCA) response, which reached over 1 million households.

The short-term MPCA program, however, required a more permanent solution and eventual integration with the government's social assistance programs to continue reaching vulnerable households affected by the conflict. Considering the need to sustainably shift humanitarian beneficiaries to Iraq's national social protection system, stakeholders initiated a dialogue in April 2018. This included the Iraqi government, humanitarian organizations, bilateral partners, and international bodies. These preliminary discussions culminated in a two-day workshop on social protection, hosted by the UK's Foreign, Commonwealth and Development Office (FCDO, previously known as DFID). Participants included the Ministry of Labor and Social Affairs (MoLSA), the World Bank, the Cash and Livelihoods Consortium for Iraq (CLCI), the Cash Working Group (CWG), and key UN agencies. The consensus was that MoLSA's Social Protection Network (SPN), serving 1.36 million Iraqi households with targeted cash transfers, was ideally positioned to support households affected by conflict and at risk of future crises or poverty. A significant outcome of the workshop was the decision to explore how humanitarian cash assistance can be aligned with the MoLSA's cash transfer programs and potential transition strategies.

Data sources and gaps

The data ecosystem in Iraq is closely related to the prevailing security situation. Iraq had successfully conducted two rounds of the Integrated Household Socioeconomic Survey (IHSES), a nationally representative multi-topic budget survey, in 2007 and 2012. The IHSES allows analyses of a range of socioeconomic indicators and the estimation of poverty trends. Continuous implementation of the national household survey was interrupted due to the deteriorating security situation. In 2017, a rapid welfare monitoring survey (also known as the Survey of Well-Being via Instant and Frequent Tracking or SWIFT) was conducted to provide interim estimates of welfare and well-being until another survey comparable in scope and coverage to IHSES could be fielded. Although the security situation had improved since 2014, many parts of the country were still insecure in 2017. Some areas of the Nineveh governorate, the seat of Daesh-occupied Iraq, were intentionally excluded from the sampling frame. Additional districts – in Anbar, Baghdad, and Salah al-din – were also judged to be too insecure for fieldwork and were replaced with other clusters from the same governorates. The final SWIFT sample covered 106 of 120 districts in the country.[21]

Eligibility for the Ministry of Labor and Social Affairs' cash assistance program was based on the Proxy Means Test (PMT) method applied initially to the IHSES 2012 and later updated to the 2017/18 SWIFT. The PMT is a method used to estimate the welfare level, usually consumption expenditure, of households to determine their eligibility for social assistance programs. The PMT uses observable

21 Sharma & Wai-Poi, 2019

household characteristics as proxies for their true consumption or welfare level, which may be difficult or costly to measure directly.[22] PMTs are widely used because they are less expensive and less intrusive than verifying consumption directly, and they can be more accurate and objective than community-based targeting methods.

As per the Social Protection Law of 2014, only households below the poverty line were eligible for social assistance support. Based on the SWIFT poverty line, Iraqi Dinar (IQD) 110,881 per person per month, the poverty headcount rate was 20 percent in 2017-18 (Sharma & Wai-Poi, 2019).[23] However, the poverty rate calculated from the SWIFT, is based on a sample of Iraq's population, and the MoLSA, does not, in practice observe every poor household in Iraq. Households apply for assistance by answering screening questions on the MoLSA website, followed up by MoLSA home visits to collect data on household characteristics chosen by the PMT method. Subsequently, the Ministry of Planning estimates household consumption per capita based on the collected PMT indicators, and if that is below the poverty line, the household is deemed eligible. If not, the households enter a waitlist or are accepted into the program if there is sufficient budget. Additional validation using pension and land records and visits by social workers are conducted to avoid inclusion errors and to support implementation.

The Cash and Livelihoods Consortium for Iraq (CLCI) used a similar but distinct PMT method to determine eligibility for Multi-Purpose Cash Assistance (MPCA) for IDPs and returnees. The PMT methods were based on entirely different household samples and survey instruments - the 2016 Vulnerability Assessment and the 2018 Multi Cluster Needs Assessment (MCNA) survey. Additionally, the 2016 Vulnerability Model (VM) focused on estimating income to earnings ratios, while the MoLSA PMT tool estimated household consumption. The VM uses a single model for all regions, unlike the MoLSA tool, which created regional models. In 2019, the CLCI revised its model using new survey data (MCNA), resulting in a tool that aligned more closely with the MoLSA approach, as it also used consumption as the dependent variable.

Methodology

To align the different assistance programs, the share of humanitarian cases that would be eligible for MoLSA's national cash transfer program needed to be estimated. While both the national and humanitarian cash transfer programs used a proxy-means-test (PMT) method to assess eligibility, the proxies and underlying data used in the models were different. To overcome this data gap, an analytical tool called pseudo-PMT (PPMT) was used to provide a bridge between the targeting models of the two cash transfer programs for potential beneficiaries. Like a regular PMT, the PPMT relies on proxies and their weights to calculate potential beneficiaries' well-being score (PPMT-score) and uses it to identify program eligibility. Unlike in a regular PMT where an optimum set of covariates that correlates best with the household welfare variable (consumption, income, etc.) are selected from an extensive list, the PPMT uses only proxies that are common to both the CLCI and the MoLSA targeting formulas.[24]

Using the data from the nationally representative SWIFT survey, an ordinary least squares (OLS) regression of household consumption on the

22 These characteristics can include factors such as the number of children, the education level of the household head, the quality and size of the household's dwelling, ownership of durable goods, and access to services like water and electricity. The process is usually undertaken with a household budget survey with data on consumption as a measure of welfare as well as the characteristics mentioned above, or proxies of welfare. A statistical model is then constructed to predict the likelihood of a household being below a certain welfare or income threshold based on the observable characteristics. The model assigns weights to each characteristic based on how strongly it is correlated with the household's income level. The sum of these weighted characteristics gives a score to each household, which can then be compared to a predetermined cutoff point. Households scoring below the cutoff are deemed eligible for assistance. However, they are not without criticism. PMTs can sometimes exclude households that are actually poor (exclusion errors) or include households that are not (inclusion errors) due to inaccuracies in the model or data collection errors. Additionally, they may not capture changes in a household's income over time unless reassessments are conducted regularly.

23 This translated to more than the existing 1.36 million beneficiaries of the MoLSA assistance program, highlighting the space for expanding access to the program.

24 Following the 2018 MCNA survey, humanitarian agencies revised the vulnerability assessment criteria for the CLCI program, creating separate models for each region: Kurdistan, the North, and the rest of the country (Center and South). These models align with the World Bank's regional definitions for the PMT formula. To assess eligibility for the government's CT program (SSN) for both current and potential CLCI beneficiaries, two sets of regional pseudo-PMTs were developed: one based on common indicators between the SWIFT data and the 2016 Vulnerability Assessment (VM), and another using updated indicators from the 2018 MCNA survey (SEVAT).

common set of proxy indicators is estimated. For each common indicator, pseudo-weight is estimated based on its association to household consumption as below:

$$y_i = \alpha + \beta' X_i + \varepsilon_i$$

where, y_i is per capita monthly expenditure of household i in natural log, and X_i is a vector of covariates/proxies, and ε_i is the idiosyncratic error term. α and β' are the estimated weights for a constant term and pseudo-proxy variables respectively. There were five common variables present in both the SWIFT survey and the Vulnerability Model using the 2016 Vulnerability Assessment: household employment rate, dependency ratio, female-headed household indicator, household size, and a dummy for households with IDP members. Only three variables—home ownership, household size, and employment rate— were shared between the SWIFT and the MCNA-based SEVAT model.[25]

By design, the PPMT cannot replicate the exact results of the full PMT, so it only estimates the probability that a household with a certain PPMT score, i.e. estimated welfare level, will be eligible for the MoLSA program determined using the full PMT model. Households with lower PPMT scores, that is, with lower consumption, are more likely to be eligible. When deciding which cases to refer to MoLSA for review, one can be conservative by only referring cases with very low PPMT scores, ensuring a higher success rate but potentially missing some eligible households. Alternatively, a more liberal approach involves referring cases with higher PPMT scores, which increases the chances of including all eligible households but adds a significant administrative workload to verify their welfare status.

Given the small set of covariates that overlap between the two eligibility criteria, the pseudo-PMT cannot solely determine qualification for the MoLSA cash transfer program. However, given a pseudo-PMT score, y_M, of household i we can calculate its probability of qualifying for cash-transfers under the full PMT. To measure probabilistic eligibility, the following logistic model is used:

$$Pr(PMT\ poor_{ir} = 1) = F(\beta_0 + \beta_1 y_M)$$

where $PMT\ poor_{ir}$ is household i's qualification status (= 1 if eligible, 0 otherwise) under the full PMT for a specific MoLSA targeting rate r, y_M is household's PPMT score and $F(z) = e^z/(1 - e^z)$. The national poverty rate (18 percent) is taken as the MoLSA targeting rate r.

Results

As expected, there's a negative relationship between PPMT scores and the likelihood of an accurate referral. In other words, households with low PPMT scores (based on the common set of variables) are more likely to also score low on the full PMT model and therefore qualify for the MoLSA cash transfer program. However, there is a tradeoff between the number of referrals and the confidence level. For instance, households in the North of Iraq with a PPMT score of 4.2 (VM-based score) or less have a 90 percent probability of qualifying for the SSN program using the full MoLSA PMT to screen potential recipients (Table 12). If the PPMT score referral threshold in the North is increased to 4.7 (VM-based score) i.e. a higher estimated level of welfare, it will entail screening more households and the referred households will have only a 50 percent chance of being eligible for the government's cash transfer program. On the other hand, due to the relatively low level of poverty in the Kurdistan region, almost no one from the region will qualify for the government program when targeting for the MoLSA CT is set at the bottom 18 percent nationally, unless referral confidence levels are reduced to 50 percent or higher. Once the pseudo-PMT is implemented in the CLCI beneficiary database, the next step involves calculating each beneficiary's likelihood of being eligible for the MoLSA program, and then, selecting the optimal referral threshold.

The results from applying the pseudo-PMT models to the CLCI's legacy database show that there is potential for significant referrals and a phased referral strategy. The analysis indicates that by referring only those in the bottom 18 percent of the population (based on the national poverty rate from the 2017/18 SWIFT survey), 24 percent of the current humanitarian database could be confidently referred to MoLSA's CT program with a 90 percent

25 Access to a public water tap can be reproduced from the SEVAT model and the SWIFT survey for only the northern region of Iraq.

TABLE 12: PPMT cut-off thresholds for referral to MoLSA program targeting the poorest 18 percent

Referral confidence level=		90%	80%	70%	60%	50%
North	VM	4.2	4.5	4.6	4.7	4.7
	SEVAT	4.3	4.4	4.6	4.6	4.8
Center-South	VM	4.0	4.5	4.6	4.7	4.8
	SEVAT	4.0	4.0	4.5	4.7	4.8
Kurdistan	VM	–	–	–	–	4.6
	SEVAT	–	–	–	–	–

Source: Table 5 from Phadera, L., Sharma, D., Wai-Poi, M., Douglas, L., Jovanovic, V., Westerman, O., & Khan, S. A. (2022).

TABLE 13: Percentage of existing humanitarian database likely to be eligible for MoLSA program at different referral confidence levels

Scenario	Program Size	Referral Confidence	Percentage of Households
High confidence, medium-small program	Poorest 18 percent nationally	90 percent	24.3 percent
Medium confidence, medium-small program	Poorest 18 percent nationally	70 percent	44.2 percent
Low confidence, medium-small program	Poorest 18 percent nationally	50 percent	54.1 percent

Source: Table 7 from Phadera, L., Sharma, D., Wai-Poi, M., Douglas, L., Jovanovic, V., Westerman, O., & Khan, S. A. (2022).

confidence level or higher. If the referral confidence level is lowered to 50 percent or higher, about 54 percent of the database would be eligible for referral (Table 13). To accommodate budget flexibility, the analysis also considered expanding the program's coverage and adjusting the referral confidence rate. Generally, more cases can be referred with higher coverage and lower confidence levels. Given the large portion of the database that could potentially qualify, the results suggest starting with smaller, high-likelihood referrals, and expanding to larger numbers as the budget allows. As the neediest cases are absorbed by the national system, the targeting threshold can be relaxed to 25, 30, or 35 percent of the poorest population. This strategy would avert higher verification burdens, mismanaged expectations and potential resentment from households which are determined ineligible.

How is this work relevant to economic inclusion?

IDPs and returnees are vulnerable, but often a neglected part of the population. Besides the psychological trauma of crises leading to their displacement and the loss of their livelihoods and social capital, IDPs experience disproportional social and economic exclusions, struggling to access basic services and assistance. They may not be covered by national social protection systems which have eligibility criteria determined pre-conflict, lack documentation or awareness, or have limited access to services, and face difficulty finding employment. The transition strategy described above aims to ensure that those in need receive the appropriate support and that programs are financially sustainable in the long term and prevent duplication of efforts across stakeholders.

The identified households with High Likelihood of Eligibility (HLE, i.e. with 90 percent confidence level,) for referral from humanitarian to the national MoLSA cash transfer program are distinctly characterized by belonging to specific geographic locations, demographic groups and to weaker economic sections. These HLE households are concentrated in Mosul, are 30 percent female-headed, and on average with one disabled and one chronically ill member. The majority of HLE households have no education or only primary level education. Average monthly household income

is IQD 137,041, with female-headed households having lower average monthly income at IQD 85,631. In general, households have expenditures that are greater than their incomes with relatively large debt levels. Despite low incomes and low per capita consumption, food consumption scores on average, across the sample, are acceptable. Food consumption may be financed by the high levels of household debt. Unemployment among HLE households is high, with 72 percent of households reporting that no member worked in the previous 30 days.

Challenges

With protracted displacement and delayed implementation of recovery and resilience activities, the humanitarian situation in Iraq is in transition. While 1.2 million Iraqis remain displaced, more than 4.8 million of the 6.1 million who fled because of the ISIS conflict have returned to their areas of origin (IOM Iraq, 2021). A pertinent challenge to transition from a humanitarian to a national social protection system is the low level of trust among displaced populations. Just because a household is likely to be eligible does not necessarily mean they are willing to be referred. Households from areas with high ISIS affiliation, whether perceived or real, may not want to enter the formal government social protection system.

A field test was conducted in late 2020 by the CLCI (Cash and Livelihoods Consortium of Iraq) to confirm recommendations from the desk-based analytical exercise. The test involved a census-like door-to-door survey in selected neighborhoods in the Northern region of Iraq, specifically in Anbar, Diyala, Kirkuk, Ninewa, and Salah al-Din governorates. The survey collected data from 10,818 households, focusing on those already identified as vulnerable. The field test aimed to gather complete information on the full set of variables used in both the humanitarian (CLCI-PMT) and government (MOLSA-PMT) cash transfer targeting models. This allowed for a more accurate assessment of cross-eligibility compared to the probabilistic approach used in the desk review. Additionally, the survey collected data on the households' willingness to be referred to the government's social protection program.

Critical findings from the field test would not have been known without new data collection, which could be the first-best preferred choice for policy makers. The field test suggests high referral accuracy of the PPMT models, i.e. households identified by the model were indeed eligible. However, exclusion errors were also extremely high at 95 percent, i.e. referring only 2 percent of the extremely vulnerable humanitarian beneficiaries to the government program. Further, one-third of the households that were eligible for humanitarian assistance in the field-test exercise were unwilling to be referred to government support. These findings, which would not have been known without new data collection, clearly highlight the limitations and challenges of a desk-based transition strategy. The choice between electing the PPMT models and collecting new data depends on capacity, budget, and appetite for budget-related uncertainty among stakeholders or finding agencies, but the choice comes with important trade-offs. Besides identifying the cross-eligibility between humanitarian and national cash transfer programs with certainty, collecting new data may elicit greater insight into the nature of transition. However, the door-to-door survey sweeps are expensive, time consuming, and may not be possible to implement due to security, lack of capacity or other reasons. In such cases, the ranking approach of the PPMT model could serve as an acceptable alternative.

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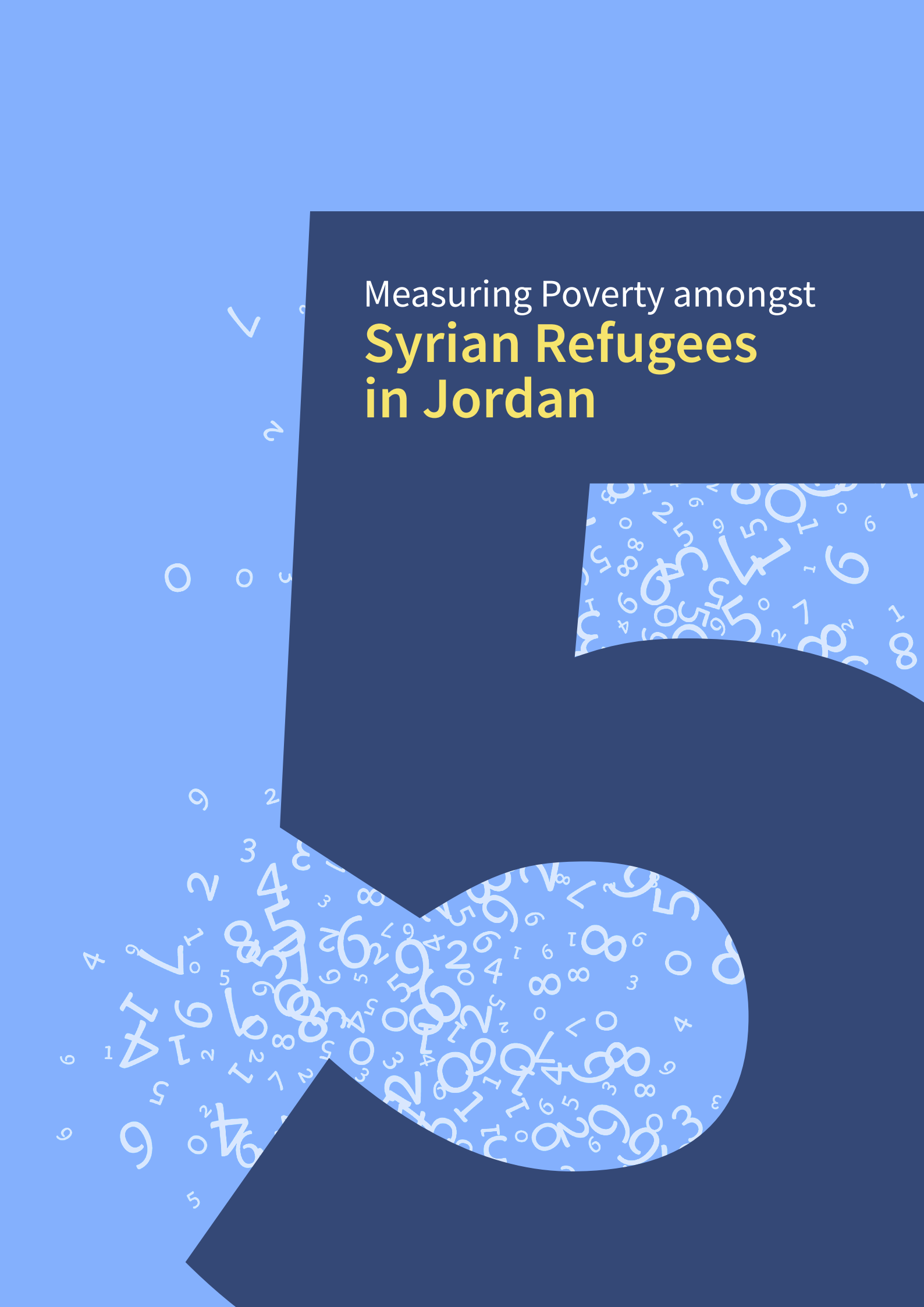
Measuring Poverty amongst

Syrian Refugees in Jordan



CHAPTER 2.5

Measuring Poverty amongst Syrian Refugees in Jordan[26]

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Abstract

The measurement of poverty amongst refugees remains in its infancy, and few studies exist which calculate poverty derived using detailed consumption modules. This chapter estimates monetary poverty for Syrian refugees living inside camps and amongst host communities in Jordan. It is the first time estimates of monetary poverty are available for refugees in both locations in the country.

The results present a conundrum. The likelihood of monetary poverty is lower when living in camps, but the revealed preference of refugees is to live in host communities. As measurement issues are unlikely to explain this result, a multidimensional measure of poverty is used to investigate whether the inclusion of additional aspects of deprivation can explain the puzzle. When education and access to services are also captured in the poverty measure alongside monetary poverty, the welfare gap between refugees in and out of camp reduces. Nonetheless, refugees in camps remain better off.

The chapter then explores whether freedom might be an overlooked dimension of welfare. People living in camps not only face restrictions on their movements but also restricted job opportunities. Refugees, like anyone, value their autonomy, the ability to earn a living and the dignity that comes from advancing their lives and those of their children. Freedom may explain why most refugees opt to live outside camps.

Editors' Note: *This chapter summarizes an important development in welfare analytics for displaced populations – generating comparable measures of poverty between camped and non-camped refugees. By examining and addressing the key challenges and approaches to overcome those challenges in poverty estimation for populations where large shares of consumption are provided in kind, the chapter makes important gains in the practice of welfare analytics of forcibly displaced groups.*

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26 This chapter was adopted from Hoogeveen and Chinedu's (2024) edited volume: *A Triple Win: Fiscal and Welfare Benefits of Economic Participation by Syrian Refugees in Jordan*. The authors thank the PROSPECTS Partnership Programme, funded through the World Bank-administered Multi-Donor Trust Fund for Forced Displacement, for its financial support and encouragement.

Introduction

Measures of monetary poverty have long been important indicators of social progress and a means to compare welfare over time and across different populations. Perhaps the most publicized monetary poverty measures are those produced by the World Bank, using the international poverty line (IPL). They demonstrate how global poverty has declined since the 1990s, and how poverty varies from country to country. Countries generate and publish their own poverty numbers, using national poverty lines, allowing comparisons between population groups, across districts, or between poor and non-poor people within a country.

For one of the most vulnerable populations in the world, refugees, measures of poverty are rare. When poverty estimates are available, they typically have been derived using imputation methods (e.g. Beltramo et al. 2020; Dang and Verme 2023), rather than through direct measurement, or they have been calculated from abbreviated consumption modules (Verme 2016; JDC, World Bank and UNHCR 2020) which are known to bias consumption estimates downward and poverty upward (Beegle et al. 2010). Exceptions include World Bank (2019) and Nguyen et al. (2021) which present poverty estimates for refugees in Uganda and Chad which are derived from detailed consumption modules that are comparable to those used in national household surveys.

This chapter presents monetary poverty estimates for Syrian refugees in Jordan derived from direct measurement of consumption of refugee households. It discusses challenges in measuring monetary poverty, which relies on determining the market value of consumption, among refugees, especially for those living in camps where much of consumption is provided as in-kind humanitarian assistance.[27] Presented are estimates of monetary poverty amongst refugees using the cost of basic needs approach, which is recommended by the World Bank and adopted by the Government of Jordan and the Global Compact on Refugees.[28] This is the first time estimates of monetary poverty for refugees in Jordan are derived for those residing in and outside camp, allowing for welfare comparisons between both groups.[29]

Some of the results from comparing poverty of refugees living inside and out of camps are counter intuitive. It is found, for instance, that monetary poverty amongst refugees staying in camps is lower than amongst refugees living in host communities. Why would people who have the option to live in a camp voluntarily opt to go outside and, in doing so, accept a lower level of welfare than they might have otherwise? The answer may be that there are aspects to welfare which are not captured by the market value of consumption. Verme (2023), suggests going beyond monetary welfare metrics when assessing the welfare of refugees by considering access to jobs, services, and basic infrastructure when gauging the living standards of refugees and IDPs. When Obi (2021) does so, by comparing subjective quality of life indicators between Syrian refugees living in and out of camp he finds that refugees living in host communities report a higher (self-reported) quality of life than those living in camps.

This chapter looks at why people may opt to live outside camps despite the risk of being worse off financially. It looks beyond monetary poverty by examining non-monetary poverty indicators, in particular the multidimensional measures of poverty (MPM) developed by the World Bank. It shows that when additional aspects of poverty are accounted for, refugees living in host communities are on balance worse off than those living in camps.[30]

The chapter, finally, explores whether freedom is a dimension of well-being that has been overlooked in literature on welfare of refugees, particularly when comparisons are made between those living in and those living outside camps. People living in

27 Sohnesen and Schmieding (2021) underline how monetary income may not be a tenable welfare indicator for displaced populations who are entirely dependent on humanitarian assistance while even monetary consumption may be distorted because displaced populations do not participate in typical markets for the food and non-food items they need. For refugees in Jordan we find that such estimates are feasible, not in the least because much assistance is provided as cash assistance, while the value of in-kind assistance can be reasonably proxied.

28 Those interested in measuring monetary poverty are referred to the Handbook on Poverty and Inequality by Haughton, J. and Khandker, S.R..

29 Verme et al. (2016), limit themselves to poverty measurements for out-of-camp refugees and use an arbitrary poverty line.

30 For more information about the MPM see: https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure.

host communities have greater freedom to move around, have greater agency and more economic opportunities. Equating welfare to consumption of tangible goods and access to infrastructure and services fails to take account of the value people attach to the ability to move about freely.[31]

The chapter is structured as follows: The next section offers a brief overview on refugee poverty measurement with a focus on Jordan. Section C details the approach used to measure poverty among Syrian refugees living in and outside camps. This section is detailed to allow for an adequate discussion of issues arising when measuring poverty amongst refugees. Readers less interested in such details can skip this section and focus on results which are presented in section D. In this section, estimates of monetary poverty for refugees living in and out of camps are presented along with a brief poverty profile. Section E presents non-monetary poverty estimates, in particular the multi-dimensional poverty measure developed by the World Bank and the Freedom Index proposed in this chapter. A discussion on measuring welfare for refugees follows in section F. Conclusions are presented in section G.

Measuring poverty among refugees in Jordan: a brief history

Measuring refugee poverty is receiving increasing attention but is still at an early stage (Pape and Verme 2023). This is powerfully illustrated by the Indicator Framework accompanying the Global Compact on Refugees. It presents the proportion of refugee and host community populations living below the national poverty line in eight host countries (UNHCR 2022).

Measuring monetary poverty is resource intensive. Completed surveys with the necessary elements to measure the poverty level of refugees are limited.[32] Refugee poverty estimation requires survey data which must be representative of the refugee population. Surveys must include enough information to compute a comprehensive estimate of consumption or income (including consumption or income from own production), correctly address differences in prices across space and time and construct a correctly weighted distribution of consumption or income per person.

Jordan has, for a some time now, been at the forefront of measuring poverty amongst refugees. Verme et al. (2016), in a volume on the Welfare of Syrian Refugees, present the first ever refugee poverty estimates undertaken by the UNHCR or the World Bank. They estimate poverty for out-of-camp refugees using the UNHCR proGres registration data base and Home Visits data. Though their estimates come with methodological limitations, the extensive analysis they offer demonstrates the value of analyzing poverty amongst refugees.

In 2018, and undoubtedly to better inform its decisions regarding the large number of refugees residing in the country, the Government of Jordan (GOJ) fielded a Household Income and Expenditure Survey (HIES) to collect detailed consumption data from Jordanians as well as from non-Jordanians residing in the country. The survey has been used to calculate a national estimate of poverty (15.7 percent) but estimates of poverty amongst any sub-populations have not been published.[33]

As these efforts at refugee poverty measurement were ongoing, UNHCR Jordan implemented its own surveys to assess refugee well-being. These VAF (Vulnerability Assessment Framework) surveys initially focused mostly on protection issues and covered refugee demographics, shelter, water and sanitation, health, food security, livelihoods, financing and coping mechanisms but not household consumption. This changed in 2021.

To strengthen poverty measurement amongst refugees, a collaboration between the Joint Data Center, the World Bank and the UNHCR Jordan set out to reimagine the 2021 (fifth) VAF survey with the

31 This omission is the more remarkable if one considers that the main way to punish people is to take away their freedom by putting them in prison. Yet as few people are in prison, or live in refugee camps, the absence of freedom as a welfare metric is easily overlooked.

32 The 2023 indicator report presents poverty estimates for eight countries: Brazil, Chile, Chad, Colombia, Costa Rica, Ethiopia, Kenya, and Uganda (UNHCR 2023).

33 Other poverty estimates for Syrian refugees in Jordan can be found in JDC/World Bank/UNHCR (2020). These estimates are based on microsimulations.

objective of estimating refugee poverty to meet the requirements of the Global Compact for Refugees. The first objective of this collaboration was to arrive at an estimate of poverty for Syrian refugees that replicates poverty measurement as implemented by the Jordanian authorities and that overcomes the limitations of the earlier poverty estimates derived by Verme.[34] To this end, a consumption module was introduced in the VAF-survey that mirrored the consumption module used in the HIES.

Estimating monetary poverty amongst refugees

The estimation of poverty starts with obtaining an accurate measure of household consumption. Such measures are typically obtained from detailed consumption surveys. Implementing such surveys is time intensive, not in the least because their consumption modules can be very detailed. Jordan's HIES, for instance, collects information for more than 500 items.

To avoid the VAF-survey becoming unwieldy and difficult to implement, the team sought to strike a balance between collecting sufficiently detailed consumption so that the HIES estimate could be approximated, but not so detailed that the survey became unmanageable. After all, in addition to collecting consumption information, the VAF survey also included questions related to water, sanitation and hygiene (WASH), shelter, food security, coping strategies, finances, documentation, health, education, and livelihoods. Moreover, as the survey was fielded during the pandemic, a module on COVID-19 knowledge, attitudes, and practices was added.

Survey data was collected face to face over a period of sixteen weeks between the 5 July 2021 and 9 October 2021 for out-of-camp refugees and between 7 October 2021 and 19 December 2021 for refugees in camps. The remainder of this section offers more information about key aspects of the survey.[35]

Sampling

The sampling frame for the 2021 VAF survey is drawn from the proGres database. It is the main registration database used by the UNHCR[36] and includes all data collected from refugees during their first registration as well as information collected during (annual) updates.

Upon arrival refugees belonging to the same family are registered jointly as a case. A case is a processing unit, which is headed by a principal applicant and includes dependents. At registration, personal information for every case is collected as well as other case-relevant information.[37] Upon registration UNHCR issues an Asylum Seeker Certificate with 12 months' validity. Once a year the Asylum Seeker Certificate must be renewed. Upon renewal registration information is verified, validated, and updated as appropriate. The regular updating of who is registered as refugee makes proGres an excellent sampling frame.

Using proGres, a stratified sampling strategy was designed for out-of-camp and camp refugees. For out-of-camp refugees, stratification procedures were based on the refugee's nationality and governorate of residence. The strata included Syrian, Iraqi, and other nationalities from all twelve governorates of Jordan. Refugee households within each governorate were first grouped according to the three nationality groups, after which probability proportional to size (PPS) methods were used to determine the number of cases to interview. For camps, sampling was limited to the two largest

34 Verme and colleagues had to contend with limited consumption information. They had at their disposal Home Visits surveys which asked three questions on welfare, one question on income structured in seven items, and two questions on expenditure, the first structured in six items and the second structured in ten items. As the authors readily admit and as Beegle et al. 2010 and Christiaensen et al. 2022 show, the length of the recall period and the small number of items limit the precision of the resulting poverty estimates. Unable to calculate caloric values from the consumption information at their disposal, the authors adopted an arbitrary poverty line set at JD 50 per capita per month, the amount used at the time by the UNHCR for its cash assistance.

35 Those interested in additional details should turn to Obi (2022).

36 https://www.unhcr.org/registration-guidance/chapter3/registration-tools/

37 The data set collected includes all relevant personal data such as name, date of birth, place of birth, gender, date of flight, arrival date in Jordan, registration date, ethnicity, religion, specific needs, and vulnerabilities. It also includes a very short summary of the refugee claim; the whereabouts of close relatives whether in country of origin, country of asylum, or other countries; educational details; professional skills; occupation in country of origin and asylum, if any; the addresses in country of origin and the country of asylum including key movements within the country of origin; and reasons for flight. If refugees have relatives who are registered refugees in Jordan, then the cases are linked.

refugee camps, Azraq, and Zaatari, which host only Syrian refugees. Overall, 10,765 surveys were completed, of which 8,557 outside, and 2,208 inside camps.

The fact that respondents are sampled using proGres is a strength as well as a limitation of the VAF-survey. Most Syrian refugees have probably been registered at some point in time (Verme et al. 2016), but it is less evident how many engage in annual renewal. Only those who expect benefits from having an up-to-date Asylum Seeker Certificate tend to do so. Consequently, and because the sample was drawn from active refugees, there might be selection bias in favor of Syrian refugees receiving assistance.

Defining households

The proGres system tracks cases, usually nuclear families, that registered jointly upon arrival in Jordan. The definition of a case differs from that of a household used in consumption surveys: "people who live in the same place and share meals together" (Oseni et al. 2021). In practice, most cases and households are the same, but not always. For instance, refugees may have opted for living arrangements in which they share their house, but not their meals, with others. Hence, even though the case is the unit of sampling, for the purpose of computing poverty, one must identify those "who live and eat together".

The VAF-survey identifies who shares what with whom to make this possible. Those who share a house but do not share food are treated as separate households. That means they each respond to the consumption module. By contrast, one consumption module was completed when two cases (families) live together and share meals. All together the VAF surveyed a total of 10,765 cases, who in 8,093 instances were sharing a dwelling and who comprised 8,051 households.

Consumption module

The consumption module collected information on food and non-food items. Food consumption was collected based on a seven-day recall. The food consumption module was divided into two parts. The first comprised three leading questions to assess whether any household member: 1) Consumed a food item. 2) Purchased a food item. 3) Received a food item as humanitarian aid or in-kind assistance. In the second part, those who answered yes to any of the leading questions were asked to identify how much of each item had been consumed, purchased, or received as humanitarian aid.

The nonfood consumption module had different recall periods depending on the sub-category. Transportation, communication, and personal care items had a one-month recall period, clothing and footwear an annual recall period, while housing and utilities had an open recall period ranging from daily to annual. All consumption items and recall periods were identical for the camp and out of camp samples.[38]

The HIES consumption module collects information on 553 items, a level of detail considered too burdensome to include unabbreviated in the VAF-survey. As the interest was primarily to identify the poorest households correctly (for assistance decisions it is less important to estimate the consumption of wealthy households correctly), the team used the results of the 2017/18 HIES and ranked all items consumed by the poorest 20 percent of non-Jordanians at sub-category levels and selected from each the top items in terms of quantity consumed and number of households consuming them. After various iterations an abbreviated consumption module was created that accounted for approximately 90 percent of the total consumption of the poorest non-Jordanians.

To further reduce the burden on interviewees, two consumption modules were constructed – a short one with 62 consumption items and a long one with 96 items (Table 14). To arrive at unit prices needed to value consumption and determine caloric intake, the long form (but not the short one) asked how much respondents who had purchased items had paid for these items and the quantity purchased. To assist respondents to recall quantities of food purchased or consumed, a photo was provided displaying different types of food packaging and their corresponding equivalents in kilograms. Seventy-five percent of the interviewees in each governorate

38 The consumption modules used in and out of camp were near identical, with a few notable exceptions such as rent which was not asked in the camp. The out-of-camp consumption module, by contrast, did not capture ownership of durable goods.

completed the short consumption module, while the remaining 25 percent completed the long form.

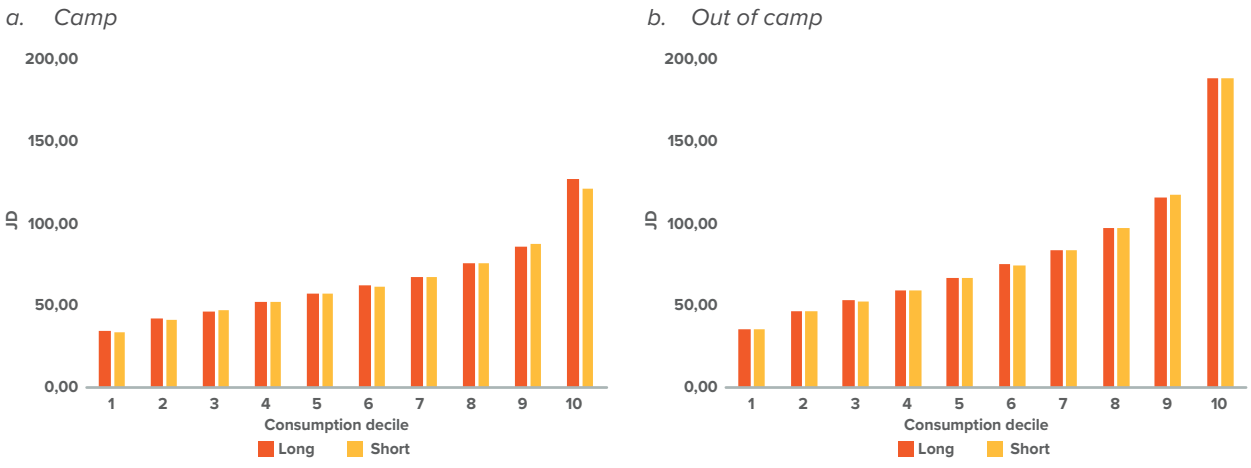
Figure 10 presents results for the long and short form. In line with the literature (Beegle et al. 2010) the quantity of consumption recorded using the long form exceeds that using the short form. Differences are small however, typically less than half a Jordanian Dinar (JD): only for households in the top decile are differences larger.

TABLE 14: Number of items in long and short survey forms

Category	Sub-category	Short	Long	HIES
Non-Food	Cleaning materials	1	2	37
	Clothing and footwear	1	3	67
	Education	1	4	19
	Health	2	3	15
	Housing, water, electricity, and gas	7	8	48
	Personal care	5	11	36
	Transport and communication	2	4	37
	Tobacco	1	1	14
	Other	1	2	54
	Durables (Camp only)	4	4	41
	Total	**25**	**42**	**368**
Food	Fruit and vegetables	11	16	63
	Grains and products	5	6	20
	Proteins and fats	12	16	46
	Beverages, spices, sweets	8	10	46
	Meals in Restaurants	1	6	10
	Total	**37**	**54**	**185**
Total		**62**	**96**	**553**

Source: VAF 2021; HIES 2017/18.

FIGURE 10: Comparing reported consumption using long and short forms, by decile



NB. Graphs represent the reported nominal consumption of Syrian refugees per person per month from the VAF survey. The above consumption aggregate does not include imputed rent and utilities for Syrian refugees in camp.
Source: VAF 2021.

Valuing in-kind assistance

Refugees living in camps receive certain assistance in kind. Thus, survey respondents were unable to value their use of water or electricity. Also, the rental value of the shelter they occupy was not asked for in the VAF. Yet, to estimate monetary poverty in a way that allows comparison of the welfare of refugees living in and out of camp, it is critical to obtain estimates for the consumption of these goods.

To arrive at a valuation for water the average per capita cost from outside the camp was used. For electricity, administrative expenses were divided by the number of households in camps, assuming each household has equal electricity usage.[39]

The estimate of rent was made using the fact that some camp refugees rent out the shelter put at their disposal. To capture the value of this rent, interviews were conducted with camp administrators to inquire about the rental costs. The rent was found to range from 75 JD to 150 JD per month depending on the shelter's condition. This information was used to approximate monthly rental value. Starting from a minimum rental value of 75 JD, each camp shelter was given an assessed value based on the condition of the dwelling captured in the VAF-survey, such as whether it has a makeshift extension, a concrete floor, the conditions of roof, wall, door, electrical connection, light, ventilation, etc.

Consumption aggregates

The construction of the consumption aggregate used for poverty measurement started with a nominal aggregate which was subsequently spatially deflated before an adjustment was made to account for the different lengths of the consumption forms. The resulting consumption aggregate was used to measure refugee poverty.

Comparisons of welfare need to be based on real (as opposed to nominal) differences, implying that price adjustments are necessary as prices differ over time and across space. In this instance no adjustments were needed for temporal changes as the surveys were completed within a short period of time, three months, and Jordan's annual inflation in 2021 was low (1.3 percent). Yet spatial deflation was necessary as prices vary in and out of camp, between north and south of the country and between rural and urban areas. A Paasche index was used to account for regional price variations.[40]

Next, the consumption aggregate was adjusted for the fact that the short form reports lower levels of consumption than the long form. The long form was considered to correctly estimate consumption, so short form consumption was adjusted by applying a correction factor which was sensitive to distributional differences:

$$CF_{ith} = \frac{\alpha_{ith}}{\beta_{ith}}$$

where α_{ith} is the mean of deflated consumption aggregate at each percentile in the long form. β_{ith} is the mean of deflated consumption aggregate at each percentile in the short form. After the correction has been applied, a t-test analysis confirmed no significant difference in consumption aggregate for the short and long forms.

Table 15 shows real monthly total (adjusted) per capita consumption in and outside the camps. The total consumption of refugees in camps amounts to JD 92 per person per month, higher than JD 83 outside the camps. Imputed rent constitutes 19 percent of total consumption in camps, less than the share of rent outside of 29 percent. Food consumption in the camp is JD 31 per person per month, constituting 34 percent of total consumption. Outside the camp, food consumption is JD 24 per capita per month, constituting 29 percent of total consumption. Refugees in the camps spend more on food than those outside, but this is not due to higher food costs. The data show no major difference in the cost of food in and outside the camps or in the share of consumption on different food classes. About 40 percent of food consumption in both locations comes from cereals and sugar.

39 This is a strong assumption. An alternative approach is to estimate the cost based on the availability of various household electrical appliances. The VAF survey has information on appliances, but usage levels are unknown, making this method impractical.

40 Spatial deflators were derived using food consumption only as for nonfood items they survey did not collect information on quantities purchased (which is necessary for calculating spatial deflators). The deflator was then applied to total consumption (food and non-food).

TABLE 15: Monthly consumption aggregate per capita per month for Syrian refugees

	Out of camp		Camp	
	JD	Percent	JD	Percent
Per capita consumption	83.0		91.8	
Transportation and communication	6.6	7.9	6.2	6.7
Personal care	4.1	4.9	4.7	5.2
Tobacco	3.4	4.1	8.2	9.0
Health	8.4	10.1	6.8	7.4
Education	1.1	1.3	0.5	0.6
Clothing	2.0	2.4	5.1	5.5
Cleaning	2.1	2.5	2.3	2.5
Utilities	7.6	9.1	8.7	9.5
Rent	24.0	28.9	17.8	19.4
Food	23.9	28.8	31.4	34.2
of which				
Cereals		31.5		32.9
Fruit and Veg		20.1		18.1
Legumes		2.2		1.2
Meat and fish		14.2		13.5
Dairy		17.0		17.1
Oil and fat		6.4		8.0
Sugar		8.5		9.1

Source: VAF 2021.

Determining cost-of-basic-needs poverty line

The poverty line is the benchmark against which the consumption of individuals is assessed. Those consuming less than the poverty line are considered poor, those who consume more are non-poor. The poverty line consists of two components—a food poverty line and an allowance to account for basic non-food needs.

Food poverty line

According to the CBN approach, the food poverty line reflects the cost of consuming the reference basic needs basket, i.e. the food bundle corresponding to a minimum caloric intake. In the case of Jordan, the food poverty line corresponds to the cost of consuming 2,300 kilocalories, the number of calories used to determine Jordan's national poverty line.

To estimate the food poverty line, a basic needs basket must be established. Doing so requires a reference population, which in this instance are those in the 2nd to 7th consumption deciles. Once composite items and prepared meals are dropped because they are too heterogenous to meaningfully derive prices and caloric values, a list of 34 food items is kept from which the food basket is constructed. A democratic approach is used in calculating the quantities of the food basket. This entails computing the cost per calorie of the selected food basket for the reference population. The weighted average is less than the recommended daily calorie requirement. This average is then scaled up to the target number of calories (2,300 calories per adult equivalent per day).

The food poverty line is calculated after pooling observations for refugees in and out of camp. It is estimated at JD 200.1 per person per year or JD 16.7 per month.

Non-food component of the poverty line

To fully reflect basic needs, the poverty line includes an allowance for non-food essentials, needed to sustain the minimum standard of living. The nonfood

component of the poverty line is calculated using the "upper Ravallion" method which uses the value of nonfood consumption for households whose food consumption is close to the food poverty line.[41] The non-food component is estimated at 64 JD per person per month.

Setting the Refugee Poverty Line

The overall poverty line is the sum of the food poverty line and the non-food allowance, as presented in Table 16. The refugee poverty line based on the 2021 VAF for Jordan is JD 81 per month. A refugee is defined as poor if the total value of monthly per-capita consumption is less than JD 81.

TABLE 16: Composition of the poverty line

	JD
Food component	16.7
Non-food component	64.0
Poverty line	80.7

Source: VAF 2021.

Monetary Poverty

Using real adjusted per capita consumption and the poverty line, it is now possible to calculate poverty. Table 17 presents poverty incidence, depth, and severity for those in and out of camp.

About 62 percent of the Syrian refugees outside the camp are poor compared to 45 percent in camps. The poverty rate for all Syrian refugees is 58 percent.

Poverty depth (a measure of how much it would take to bring consumption up to the poverty line) is higher for refugees living out of camp than those living in camp (19 percent versus 9 percent). So, not only are refugees living outside camps more likely to be poor but they are also further removed from the poverty line (their intensity of poverty is greater) than refugees living in camps.

That poverty is more extreme amongst out-of-camp refugees is also illustrated by poverty severity which squares the poverty gap and thus gives greater weight to those further removed from the poverty line. Poverty severity is 7 percent for those living out of camp and 3 percent for those in camps.

The finding that monetary poverty for those living in host communities is higher than for those living in camps is both noteworthy and surprising. All refugees in Jordan have the option of living in a camp environment. That they prefer to live outside, where the likelihood of living in poverty is higher, and the depth and severity of poverty are greater, is counter-intuitive, at least at first sight.

Sensitivity analyses

To assess the robustness of the finding that refugees who live out of camp are poorer, sensitivity analyses are carried out in which the construction of consumption aggregate in camp is varied, as is the construction of the poverty line. After all, when constructing the consumption aggregate several non-standard assumptions had to be made to deal with in-kind consumption by refugees living in camps. These assumptions affect the amount consumed and, because one common poverty line is used, could have an impact of the poverty comparison for those living in and out of camp.

TABLE 17: Estimates of Poverty, 2021 (percentage of population), poverty line = JD 81

Residence	Headcount ratio Percent	Poverty depth (gap) Percent	Poverty Severity percent
Camp	45	9	3
Out-of-camp	62	19	7
All Syrian refugees	58	17	6

Source: VAF 2021.

41 To be more precise, the upper Ravallion method considers households whose total spending on food equals the food poverty line. It is then considered how much these households spend on non-food items. This amount reflects the non-food component of the poverty line.

TABLE 18: Sensitivity of poverty line

	Scenario 1		Scenario 2		Scenario 3		Preferred Scenario	
	Out of camp	Camp	Out of camp	Camp	Out of camp	Camp	Out of camp	Camp
Food component (JD)	16.7	14.9	16.7	16.7	16.7	16.7	16.7	16.7
Non-food component (JD)	64.4	31.5	64.9	32.7	32.1	32.1	64.1	64.1
Poverty line (JD)	81.1	46.4	81.6	49.4	48.8	48.8	80.8	80.8
Poverty incidence (%)	61.9	22.6	62.4	26.1	55.3	25.1	61.8	44.9

Source: VAF 2021.

In scenario 1, the food and non-food components of the poverty line are calculated separately for refugees living in the camp and those living outside, using a consumption aggregate that does not account for the values of in-kind assistance (rent, electricity, and water) provided in the camp. This scenario accepts that in-kind consumption for refugees in camp is hard to estimate and treats refugees in and out of camp as if they are two different populations with their own poverty lines.

In scenario 2, the food component of the poverty line is calculated jointly for the camp and out-of-camp populations. After all, even though there are differences in the way non-food consumption is calculated, the food modules of the VAF survey are identical in and out of camp.

In scenario 3, the values of rent and utilities are deducted from the consumption aggregates of both the camp and out-of-camp populations, and the food and absolute poverty line are assessed jointly.

The preferred fourth scenario has already been presented. The poverty line is calculated jointly for the camp and out-of-camp populations, using consumption aggregates that account for the values of rent and utilities in the camp based on expenditures as outlined in the Consumption section above.

The results show that the various assumptions affect the incidence of poverty in camps (it tends to lower it) but do not change the striking pattern of refugees out of camp being poorer than those living in camp. This finding is robust.

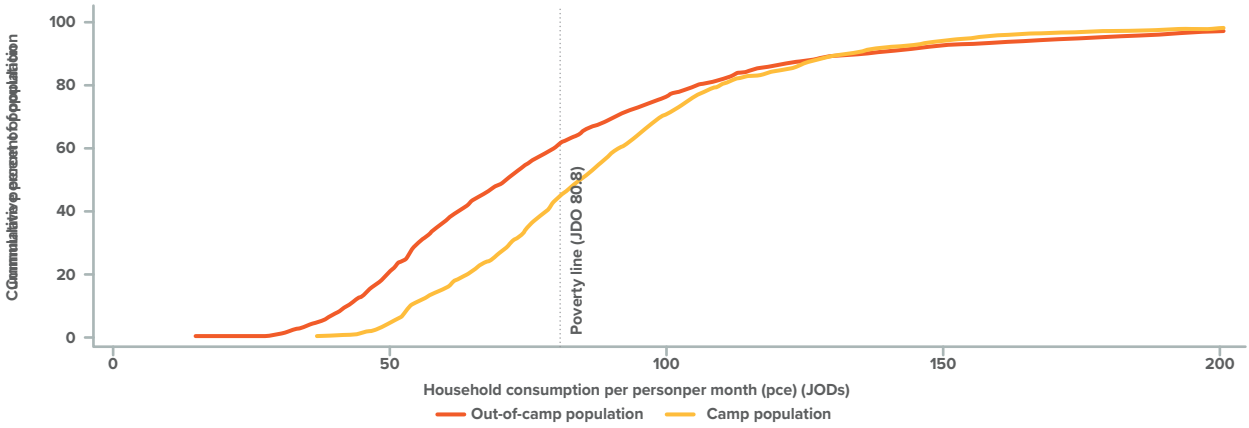
This conclusion is reinforced by considering the cumulative density function of consumption in and out of camp (using the preferred scenario). Consumption for the out of camp population stochastically dominates consumption for the camp population, until per capita consumption reaches JD 130. Since the vertical axis can be interpreted as poverty incidence for a given poverty line as it measures the fraction of the population consuming less than the point on the vertical axis, Figure 11 shows that as long as the poverty line is less than JD130, irrespective of the choice of line, poverty out of camp will be higher than poverty in camp.[42]

Poverty profile

This section presents a brief poverty profile of Syrian refugees living in Jordan. The purpose of the poverty profile is three-fold. It provides a first indication of the socioeconomic characteristics of the poor. It also helps to provide some useful indications of the important variables that one should consider in a welfare model tailored to a refugee population and it contributes to highlighting the dimensions that should be prioritized from a policy perspective.

42 Poverty incidence amongst Syrian refugees is higher than amongst Jordanians. The poverty rate for Jordanians is 16 percent (in 2018), and the poverty rate of Syrians at the refugee poverty line is 58 percent. It is important to note that poverty calculated from the HIES uses the (national) poverty line which differs from the refugee poverty line. Poverty calculated using the VAF and using the HIES are not strictly comparable. The HIES uses a consumption module that is more detailed, resulting, ceteris-paribus, in higher recorded consumption and lower poverty. Yet, also the poverty line employed by the HIES is higher. At first sight this may be seem surprising because the methodology used is the same. Both poverty lines are anchored at 2,300 calories and not in the number of items used to record consumption. Food poverty lines are, however, weakly relative: when people get wealthier, they consume more expensive calories. Moreover, the non-food component, which is calculated as a top-up based on the non-food consumption of people whose total consumption lies around the poverty line, will be higher in the HIES because of the combined effect of the more detailed consumption module, and weak relativity.

FIGURE 11: Cumulative density function of consumption in and out of camp



Source: VAF 2021.

Location

There are disparities in the poverty incidence across locations (see Figure 12), with refugees living in the rural governorates of Jerash and Maan having the highest poverty rates. Amongst the camps, poverty incidence at Zaatari camp (40 percent) lies below that of the Azraq camp (53 percent). The difference is aligned with the observation that around Zaatari there are economic opportunities while Azraq is more isolated.

Refugees residing in cities, Amman and Aqaba in particular, have the lowest poverty incidence: less than 55 percent. Although Amman has one of the lowest poverty rates, it houses the highest share of the poor, with about 34 percent of all poor Syrians living there. So, though the level of poverty is lower among the Syrian population in Amman, due to the high concentration of refugees in the capital, poverty is more prevalent there.

Socio-economic characteristics

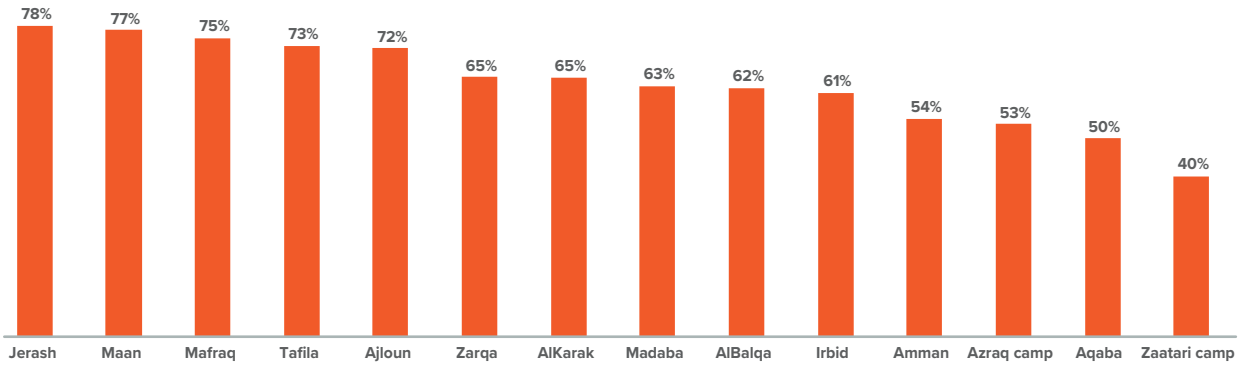
Household demographics are strongly correlated with poverty in and outside the camps. Figure 13 shows how the incidence of poverty increases with household size and is highest among households with six or more people. Despite the likelihood of poverty increasing with household size, most households are on the larger side, more so in the camps than outside them.

The positive correlation between household size and poverty is mirrored when considering family composition as Figure 14 illustrates. It shows how households with children are more likely to be poor than those without. The correlation between poverty and household size is stronger for those living outside camps.

The age of the head of the household correlates with poverty outside the camp but not so in the camp. As shown in Figure 15, in both locations, poverty rates are lower where the head is over 64 years of age, than where the head is of working age 25 to 64 years.

The education of the head of the household does not play a systematic role in explaining poverty for those living in camps. Though this lack of a (negative) correlation is somewhat surprising, it may be explained by the importance of assistance and the relative unimportance of labor income in camps. Out of camp, by contrast, where refugees rely more on labor income to make ends meet, the typical pattern is confirmed of poverty being higher amongst households whose heads have lower levels of education. Figure 16 illustrates this. Poverty is around 63-65 percent for households whose heads have no or only primary education, 52 percent when the head of household has secondary education and 43 percent when the head has university education.

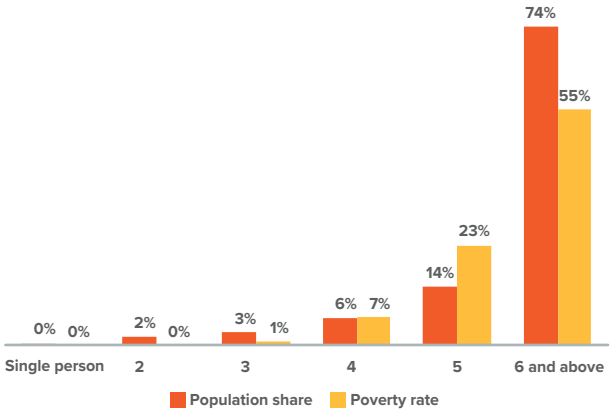
FIGURE 12: Syrian Refugee Poverty, by location



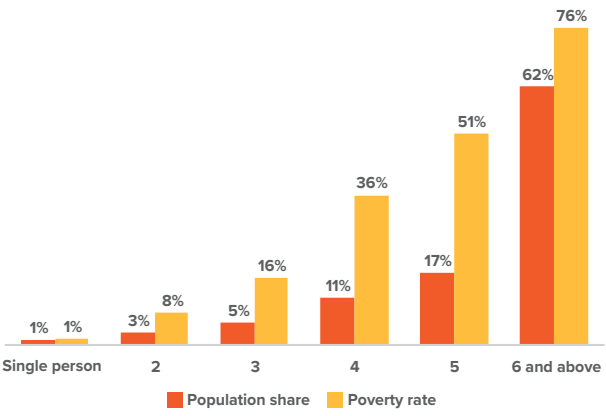
Source: VAF 2021.

FIGURE 13: Poverty and household size

a. Camp

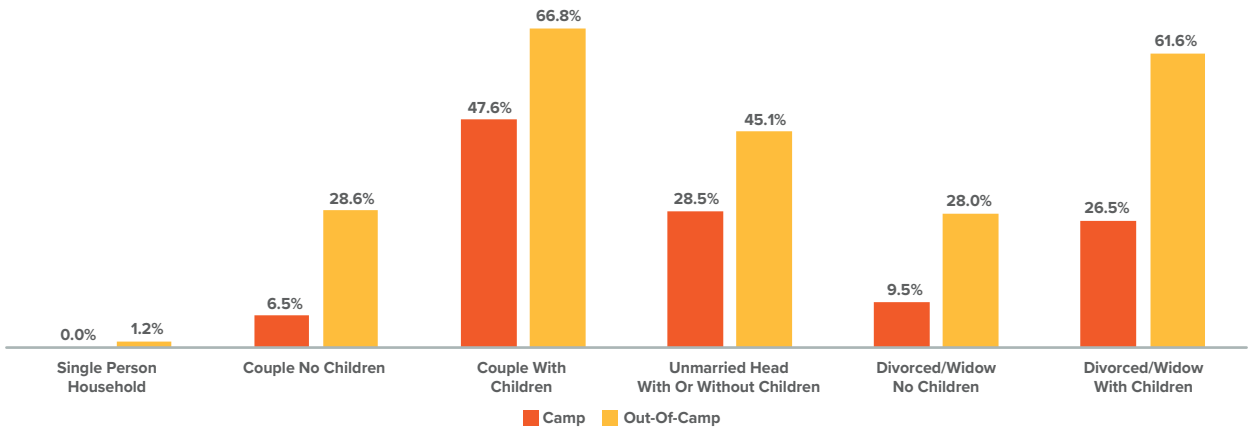


b. Out of camp



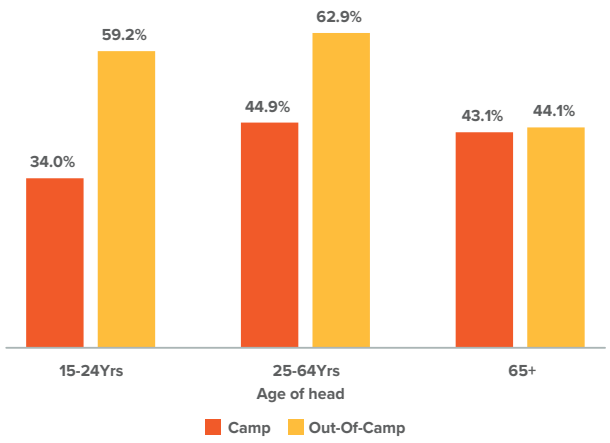
Source: VAF 2021.

FIGURE 14: Poverty and family composition



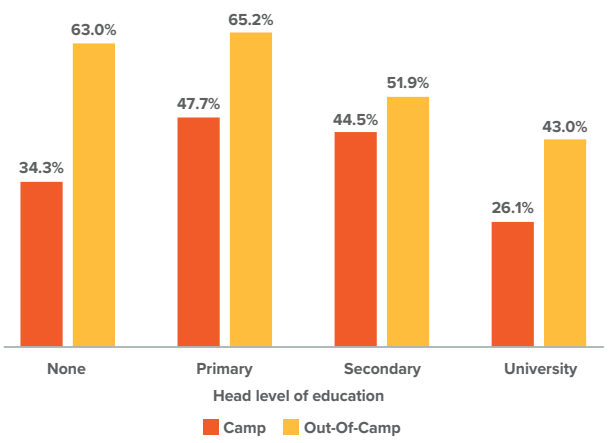
Source: VAF 2021.

FIGURE 15: Poverty rate and age of the head household



Source: VAF 2021.

FIGURE 16: Poverty rate by household heads' level of education



Source: VAF 2021.

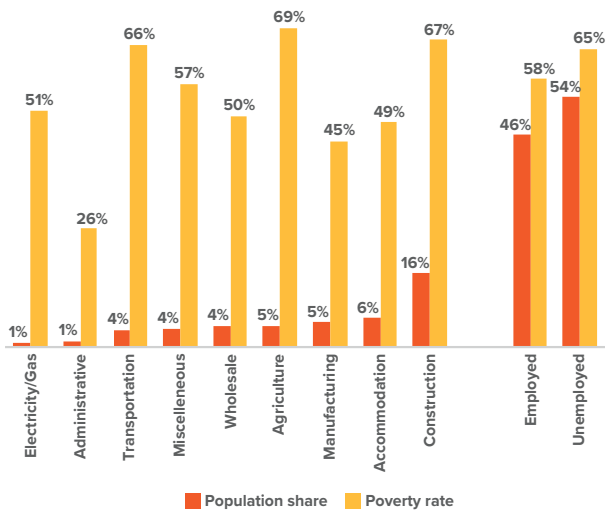
Employment

Being employed reduces the likelihood of being poor inside and outside camps. In camps, poverty in households whose heads are employed is 42 percent, against 46 percent when they are not. Outside camps poverty amongst those who work is 46 percent against 54 percent for when the head is unemployed. The sector of employment matters. Refugees who manage to be employed administratively in camp or outside are least likely to be poor. By contrast, working in agriculture or construction is associated with higher levels of poverty. Remarkably, Figure 17 shows that heads of household working in agriculture in and outside the camps have a higher prevalence of poverty than unemployed heads.

FIGURE 17: Poverty rates by occupation types

a. Camp

b. Out of camp



Source: VAF 2021.

Length of stay

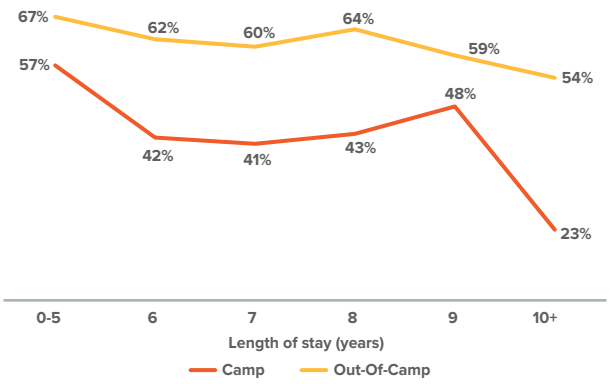
The length of stay in Jordan is an important correlate of poverty. As the duration of stay increases, the likelihood of being poor declines. Households outside the camps that lived in Jordan for ten years or more are 13 percentage points less likely to be poor than those living in Jordan for less than 5 years. The differences in poverty rates are higher in camps with around a 34-percentage point difference. One reason for the decline in poverty is the positive correlation between employment and the duration of stay (Figure 18). Another is that people build-up assets over time and ownership of assets is correlated with lower rates of poverty – presumably because many assets also have an impact on the productivity of household members. (Ownership of household assets, beds, tables, sofa sets, ovens, gas stoves, water heaters, and air conditioners correlate negatively with poverty).

Poverty regression

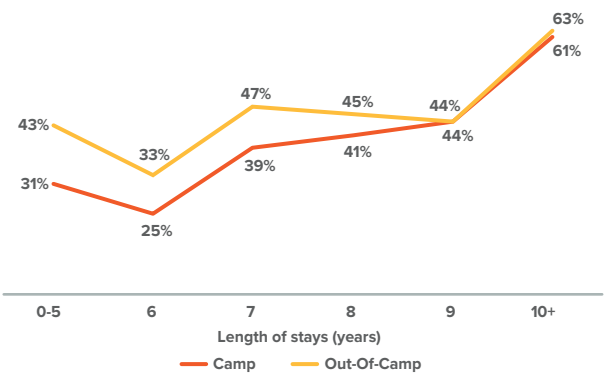
In the previous section it was noted how household size, family composition, education and sector of employment were correlated with poverty. Poverty was also associated with unemployment, owning fewer assets, and a shorter stay in Jordan. Many of these factors measure the same thing: larger families are more likely to have young children and people with low levels of education tend to be employed as manual labor in agriculture or construction.

FIGURE 18: Poverty rates and employment by length of stay in Jordan

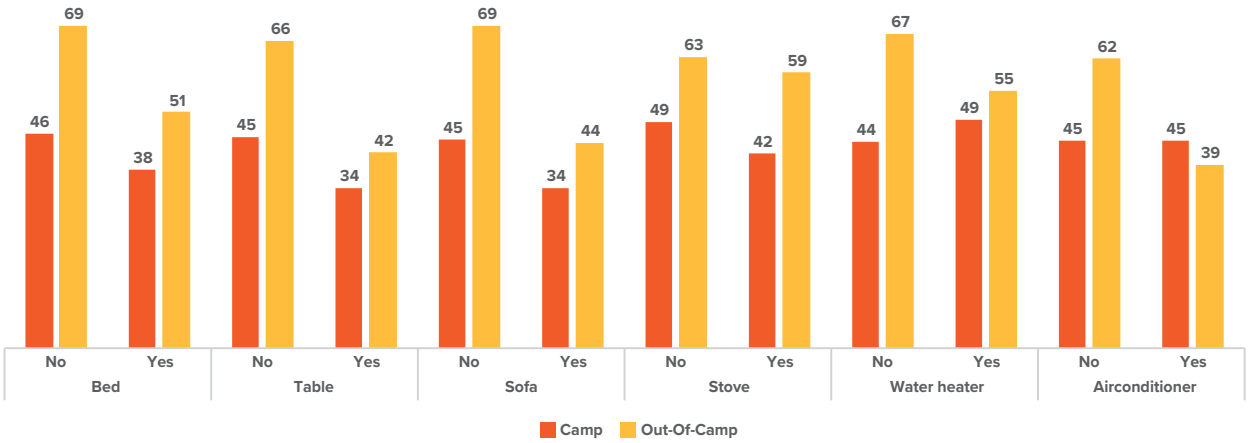
a. Poverty incidence



b. Share of households with employed head



c. Assets and poverty



Source: VAF 2021.

To identify the individual association of each variable and poverty, a poverty regression is presented with poverty as dependent variable (1=household is poor, 0 =household is non-poor) and observable characteristics as right hand-side variables. Three regressions are shown. The first combines refugees in camps and those out of camp, the second is restricted to the camp population only, and the third model is restricted to refugees living out of camp.

Household demographics, including gender, household size, age of the head, as well as education, employment, and asset ownership significantly explain poverty (Table 19). People living out of camp are more likely to be poor. Those staying in Amman are less likely to be poor. Length of stay is no longer significant. The same holds for level of education. It no longer shows up as significant, presumably because its impact operates through the labor market in which people are sorted into sectors according to their level of education.

Poverty increases with household size, but once one controls for other variables, like dependency ratio, the relation is less strong than Figure 13 suggests. Poverty increases with household size, but the nadir is already reached at household size 1.3 after which the likelihood of poverty declines as households grow larger. Poverty also increases with the age of the head of household, until the head reaches 45 years of age, at which point the likelihood of poverty declines with age.

TABLE 19: Correlates of being poor

Variables	All Syrians	Camp	Out of camp
Residence (Out-of-camp)	2.108***		
Age of head	0.0689***	0.0229	0.0791***
Age squared	-0.000754***	-8.26e-05	-0.000895***
Head's years in Jordan	-0.0349	-0.450	-0.0554*
Head years in Jordan squared	0.000432	0.0370*	0.000883
Dependency ratio	0.221***	0.355***	0.208***
Household size	0.779***	1.305***	0.773***
Household size squared	-0.292***	-0.927***	-0.254***
Sex of head (male)	-0.247***	0.0388	-0.274***
Marital status of head (base: Single)			
Married	-0.112	0.382	-0.168
Divorced/widow	-0.353*	-0.265	-0.349
Education level of head (base: No education)			
Primary	0.286	0.748**	0.183
Secondary	0.122	0.730**	-0.0566
University	-0.272	0.000683	-0.348
Head has chronic illness	-0.104	-0.0707	-0.103
Multiple sharing family	-0.536***	-0.191	-0.651***
Occupation type of head (base: Unemployed)			
Accommodation	-0.509**	0.768	-0.583**
Administrative	-0.298	-0.108	-0.768
Agriculture	0.0492	0.548	-0.137
Construction	-0.0511	-0.666*	-0.0445
Electricity/Gas	-0.0826		-0.0275
Manufacturing	-0.456**	-0.0491	-0.498**

table continue in the next page

TABLE 19: cont.

Variables	All Syrians	Camp	Out of camp
Location (base: Ajloun)			
Transportation	0.209		0.228
Miscellaneous work	-0.111	-0.311	-0.0789
Wholesale	-0.447***	-0.470	-0.466**
Household receive remittance	-1.269***	-0.217	-1.679***
Number of rooms	-0.308***	-0.0547	-0.353***
Has bed	-0.199**	-0.311	-0.169*
Has table	-0.496***	-0.504*	-0.480***
Has sofa	-0.271**	-0.347	-0.245
Has oven	-0.292***	-0.650**	-0.255**
Has stove	-0.322**	-0.708***	-0.273*
Has water heater	-0.251*	0.227	-0.258*
Has air conditioner	-0.508***	-0.296*	-0.768***
Has electric heater	-0.452**	2.023***	-0.493**
Has access to sanitation	0.254*	0.526**	0.116
Has access to electricity	0.150	0.318*	0.00670
Has access to water	0.341*	0.000211	0.535*
AlBalqa	-0.310		-0.309
AlKarak	0.291		0.289
Amman	-0.341*		-0.344*
Aqaba	0.0557		0.226
Azraq	0.683***		
Irbid	-0.226		-0.178
Jerash	0.280*		0.307*
Maan	0.540***		0.517***
Madaba	-0.334**		-0.349**
Mafraq	0.0912		0.120
Tafila	-0.0129		-0.0431
Zarqa	0.195		0.209
Zaatari		-1.075***	
Constant	-4.598***	-2.994*	-2.301***
Observations	**8,176**	**2,200**	**5,968**
Pseudo R-squared	**0.246**	**0.209**	**0.256**

*Source: VAF 2021. Note: *** p<0.01, ** p<0.05, * p<0.1*

Beyond monetary poverty

Poverty is a complex concept and a measure of poverty that focuses on the monetary aspects of consumption may not capture all its facets well (Verme (2023). An indication of this being the case follows from the observation that refugees living out of camp voluntarily seek out living arrangements in which their material welfare is lower, and their risk of monetary poverty higher. The revealed preference for not living in a camp (83 percent opt not to live in one of the camps) suggests that monetary poverty does not capture all dimensions of welfare adequately. At least not for refugees. This section explores whether dimensions might have been overlooked.

Multidimensional poverty

The assessment of poverty can be broadened by considering multi-dimensional poverty. The World Bank employs an official Multidimensional Poverty Measure (MPM) which in addition to monetary poverty comprises five other indicators to capture two additional dimensions of welfare: education (2 indicators); and access to basic infrastructure (3 indicators) – see Table 20. The MPM thus broadens the concept of monetary poverty.[43]

Each indicator has a deprivation threshold, a binary variable, which takes the value "1" when the individual or household is deprived and 0 otherwise. The MPM aggregates information across these dimensions. When aggregating across indicators, the MPM gives equal weight (one-third) to each dimension – monetary poverty, education, and basic infrastructure. Within each dimension equal weight is given to each indicator. Households are considered multidimensionally poor if they are deprived of indicators whose weight adds up to one-third or more. Because the monetary dimension is measured using only one indicator the weight attached to monetary poverty is 1/3, and people who are monetary poor are automatically poor under the broader multidimensional poverty concept.

The input variables for the various indicators are presented in the last two columns of Table 20 for refugees living in and out of camp.

The first row of Table 20 replicates the monetary poverty incidence numbers that were encountered earlier with poverty being higher out of camp than in camp. With respect to education the results are mixed when comparing refugees living in and out of camp. Those living in camps are more likely to not have any adult who is educated although children in camps, by contrast, are more likely to be enrolled in

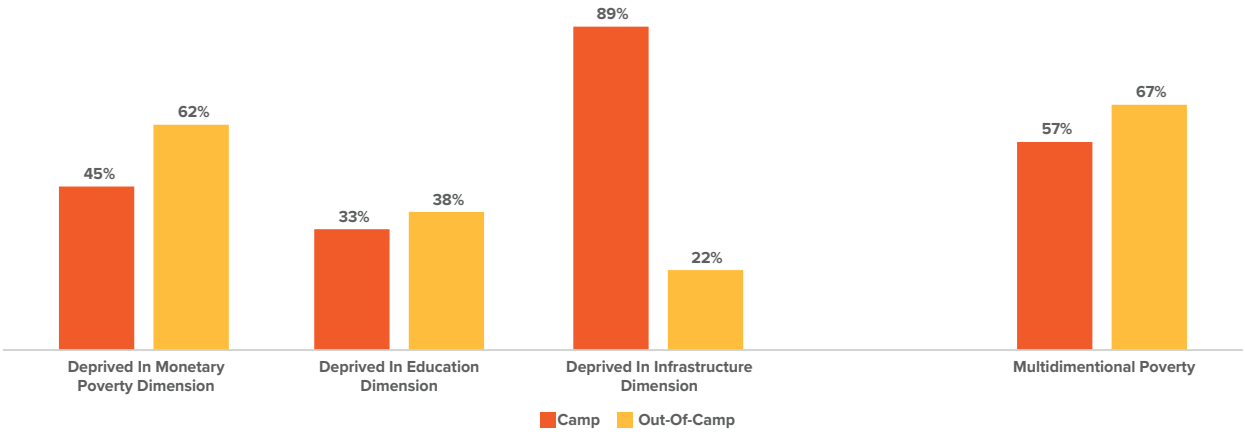
TABLE 20: Composition of MPM for refugees and deprivation levels (%)

Dimension	Indicator	Definition (Weight)	Weight	Camp	Out of camp
Monetary	Monetary	Poor at the refugee poverty line	1/3	44.9	61.8
Education	Educational attainment	No adult in the household (age of grade 9 or above) has completed primary education	1/6	30.1	24.1
	Educational enrollment	At least one school-age child up to the age of grade 8 is not enrolled in school	1/6	6.1	20.0
Basic infrastructure	Electricity	The household has no access to electricity for half of the time	1/9	83.1	3.5
	Sanitation	The household lacks access to limited-standard sanitation	1/9	15.3	11.2
	Drinking water	The household lacks access to limited-standard drinking water	1/9	27.5	13.1

Source: VAF 2021.

43 Other prominent global multidimensional measures exist, particularly the Multidimensional Poverty Index (MPI) developed by the United Nations Development Programme (UNDP) and Oxford University . The World Bank's MPM differs from them in one important aspect: it includes monetary poverty.

FIGURE 19: Multi-dimensional poverty for refugees living in camps and outside



Source: VAF 2021.

school. Considering access to services, the shares of people living in camp who are deprived are much higher than for those living out of camp. Deprivation levels for access to electricity, water, and sanitation are respectively about 80, 4, and 14 percentage points higher for those in camps than for refugees outside camps.

The picture that emerges suggests that although those living out of camp are more likely to be monetary poor, they have better access to infrastructural services. And while those living out of camp are somewhat better educated, their children are less likely to go to school.

Bringing it all together, the MPM's composite index shows that 67 percent of refugees living outside the camps are multidimensional poor versus 57 percent in the camps.

Freedom

So far refugee poverty has been considered through the lens of monetary poverty and access to education and infrastructural services. By choosing to live outside camp, refugees tend to run a greater risk of poverty. Yet many would argue that welfare is about more than income or access to electricity. It's also about freedom.

A strong proponent of this view is Nobel Prize-winning economist Amartya Sen who argues that economic development is about expanding freedoms. According to Sen, poverty shouldn't be just about the amount of income one makes (Sen 1999). Sen argues that individual well-being stems from the ability to "be and do" what one values. This freedom to pursue meaningful lives Sen calls capabilities where capabilities comprise the resources, opportunities, and constraints that influence whether and how refugees can realize their aspirations. These can include financial resources, education, legal status, access to healthcare, and social networks. Capabilities are influenced by both individual factors, such as skills and health, and structural factors, such as policies, discrimination, and conflict.

The capabilities framework can be expanded to capture people's aspirations, an approach that is more common in the international migration literature, but which is equally relevant in explaining refugees' decisions and wellbeing (Carling and Schewel 2018). The capabilities-aspirations framework recognizes that people's desires, or aspirations, shape the capabilities they prioritize and how they strive to actualize them in the face of constraints (de Haas 2021).

When deciding where to live, Syrian refugees weigh their aspirations against their capabilities. Everyone's situation is unique, and their choices are influenced by their priorities and resources. They have agency and can make choices about their lives, even within constrained circumstances. For example, a young, skilled male refugee might choose to live outside a camp to pursue work opportunities, even if it means less assistance and greater chances of poverty,

because their capabilities (skills) and aspirations (economic independence) align better with their freedom seeking behavior. On the other hand, an elderly couple without jobs might prioritize security and basic needs provided in camp over greater freedom offered outside the camps.

The interplay between aspirations and capabilities can have a profound impact on the well-being of refugees. Fulfilling aspirations, such as achieving economic independence, gaining an education, or reuniting with family, can bring a sense of accomplishment, life satisfaction, and emotional well-being. However, limited capabilities due to policies, discrimination, or lack of resources can restrict agency and trap refugees in unfavorable situations.

Recognizing the interplay between aspirations and capabilities can inform policies that prioritize refugee inclusion, expanding their capabilities, addressing structural inequalities, and offer diverse support options to empower refugees to pursue their desired lives, whether within the camp or beyond. By understanding the complex dynamics of the aspirations-capabilities framework, policymakers can better support refugees in navigating their circumstances and achieving their aspirations.

Analytically, the framework pushes for broader ways of measuring refugee poverty to go beyond monetary well-being and include other areas such as agency or life satisfaction. Refugees aspire beyond financial stability. Their aspirations include the desire for autonomy, and the ability to live a meaningful life.

With the MPM one dimension of the capabilities-aspirations framework was already captured: education, where the findings were ambiguous as refugees living outside camp are better educated (have more capabilities), while their children are less likely to attend school (aspirations).

Freedom, however, can be approached in many ways. One's subjective life satisfaction, physical and mental health, and freedom to live life without discrimination or fear of insecurity, all present dimensions of capability and deliver a better understanding of constraints the refugees face in reaching their desired life (Stiglitz et al., 2009).

The 2021 VAF survey does not comprise such dimensions, but the World Bank's Quality of Life Survey, an internet survey fielded in 2022, does. This survey captures 2,266 observations for Jordanians and 517 for Syrian refugees living in and out of camp. Table 21 shows how this survey can be used to capture various dimensions of freedom.[44]

To measure freedom, a composite freedom index is created mirroring the approach used in calculating the MPM. Seven variables are considered, *life satisfaction* –a composite measure of welfare that measures more than a person's command over material goods, *optimism for self and children*, a measure of future opportunities, *not being discriminated against, mental health, freedom to make life decisions, and sense of security*. These variables are weighted using a set of weights as shown in Table . Life satisfaction (which is an umbrella concept) is awarded a weight of 1/3 while the other six dimensions are weighted equally, 1/9 each. The weighted average of these variables, calculated for each household, is labeled the "Freedom Index." The Freedom Index is used to determine the absence of freedom a household perceives. Following the approach taken for the MPM, a binary variable called Absence of Freedom is created from the Freedom Index. This variable takes a value of 1 if the household freedom index is less than 1/3, indicating that the household lacks freedom, or 0 indicating freedom is experienced. Note that while all components are defined in a positive way (the presence of freedom), in the end the absence of freedom is reported.

The input variables for the various freedom indicators are presented in the last two columns of Table 21 for refugees living in and out of camp. The differences between those living in and out of camp are small. In terms of overall life satisfaction those

44 Results obtained through the Quality of Life Survey are not representative of the populations surveyed. Because respondents are approached through Facebook adverts and then opt-in to take the internet survey. Thus, the results from the Quality of Life Survey have to be interpreted with care. For instance young men are overrepresented amongst the respondents. A careful interpretation focuses on general patterns and on differences between different sub-populations such as between refugees and Jordanians or between refugees living in and out of camp.

living out of camp do slightly better. Refugees living out of camp are also less likely to feel discriminated against. The only indicator with a large difference between the two groups relates to feeling more empowered to make decisions and having a slightly better sense of security. Refugees in camps, by contrast, are more likely to be optimistic about their personal future and that of their children. They are also less likely to have mental health issues. On balance, refugees out of camp are more likely to experience freedom (at least according to the indicator presented here).

TABLE 21: Freedom Index components

Dimension	Definition	Weight	Camp	Out of camp
Life satisfaction	All things considered, how satisfied are you with your life these days? Scaled from 1 (very dissatisfied) to 10 (very satisfied). A score of 5 and above signifies higher life satisfaction.	1/3	23	25
Optimism for self	I am optimistic about my future	1/9	33	32
Optimism for children	I am optimistic about my children's future	1/9	30	29
Not discriminated	1. You are treated with less courtesy or respect than other people.	1/9	47	56
	2. You receive poorer service than other people at restaurants or stores.			
	3. People act as if they think you are not smart.			
	4. People act as if they are afraid of you.			
	5. You are threatened or harassed.			
	(Almost every day, at least once a week, a few times a month, a few times a year, less than once a year, never. Not feeling discrimination was defined as not experiencing discrimination within a month.			
Good mental health	Mental health is measured using the WHO-5 Wellbeing Index developed by the World Health Organization. The question is: How often over the past two weeks have you: (1) Felt cheerful and in good spirits. (2) Felt calm and relaxed. (3) Felt active and vigorous. (4) Woke up feeling fresh and rested. (5) Felt that daily life has been filled with things that interest you. (all the time; most of the time; more than half the time; less than half the time; some of the time; at no time). An index score of 0 to 100 was obtained; a score of 50 percent and above signifies good mental health.	1/9	15	11
Freedom to make life decision	To what extent do you agree or disagree with the following statements? I feel free to decide how to live my life. Scale: (Strongly agree; agree; neither agree nor disagree; disagree; strongly disagree). Freedom to live life was defined as agreeing or strongly agreeing.	1/9	34	37
Sense of security	How safe do you feel safe on the street after dark? (scale from 1 (not at all safe) to 10 (very safe). A score of 5 and above signifies a sense of security.	1/9	66	68
Absence of Freedom			56	53

Source: Quality of Life Survey 2023.

Discussion

Freedom is an important aspect of personal self-determination. This is particularly applicable for refugees who have been forced to flee their country of origin on account of a well-founded fear of persecution. For them, the right to leave is a prerequisite to securing protection against (anticipated) persecution. Freedom is, however, about more than the freedom of movement alone. It is about having opportunities to build a life for oneself and one's children, to be safe or to not to face discrimination.

For refugees, freedom is a dimension in which they are deprived. Leaving aside that many lack the monetary means to attain an acceptable standard of living, refugees are restricted in the work they are allowed to do and many experience discrimination. Those living in camps are more freedom deprived as they experience greater restrictions to their movements.

Refugees face legal restrictions that deprive them of freedom. These restrictions are of a different order than those typically experienced by citizens even when they face discrimination or insecurity. As freedom is an important aspect of welfare (so important that the preferred way to punish criminals is to deprive them of freedom), existing measures of poverty, such as monetary poverty and the multi-dimensional poverty index, fail to capture its importance. Consequently, any comparisons of welfare between host country citizens and refugees that limit themselves to monetary poverty or multi-dimensional poverty, underreport deprivations experienced by refugees.

With the data at hand, it is not possible to calculate an enhanced MPM as dimensions of freedom are not included in the VAF-survey but Table 22 illustrates what an expanded MPM could look like.

It is beyond this chapter and this volume to detail how a freedom dimension should be defined and measured. Extensive literature on this already exists. However, this is complicated by the fact that the measurement of freedom typically relies on subjective data. The use of subjective data to measure welfare objectively is a challenging field (see Ravallion 2012). Personality, for instance, is likely to affect a person's responses to a question about optimism for the future. Frame of reference matters. A refugee living out of camp may be satisfied with life when comparing herself with those living in camp, but very unsatisfied when comparing their life now to the life they lived before displacement. Which reference frame does the respondent use? Frames of reference can be manipulated, which can lead to different answers in a survey even

TABLE 22: Components for an extended multi-dimensional poverty index for refugees

Dimension	Indicator	Definition (Weight)	Weight	Camp	Out of camp
Monetary	Monetary Poverty	Poor at the refugee poverty line	¼	44.9	61.8
Education	Educational attainment	No adult in the household (age of grade 9 or above) has completed primary education	1/8	30.1	24.1
	Educational enrollment	At least one school-age child up to the age of grade 8 is not enrolled in school	1/8	6.1	20.0
Basic infrastructure	Electricity	The household has no access to electricity for half of the time	1/12	83.1	3.5
	Sanitation	The household lacks access to limited-standard sanitation	1/12	15.3	11.2
	Drinking water	The household lacks access to limited-standard drinking water	1/12	27.5	13.1
Freedom	Absence of freedom composite	Experiences less than a threshold of freedom	¼	55.5	53.2

Source: VAF 2021; Quality of Life Survey 2023.

when objective circumstances have not changed. For example, Kristensen and Westergaard-Nielsen (2007) find that 20 percent of survey respondents in Europe gave a different answer on job satisfaction when asked twice within the same interview.

Capturing freedom as a dimension of welfare for refugees remains important despite such measurement challenges and complications. There is a strong case for including freedom as a dimension in future refugee welfare surveys.

Conclusion

The measurement of poverty amongst refugees is still in its infancy, and few cases exist where monetary poverty for refugees has been derived. This chapter starts out by producing such monetary poverty estimates for Syrian refugees living in camps and in host communities. It is demonstrated how estimating monetary poverty is an involved exercise, requiring detailed consumption modules and careful data processing. Even then, producing comparable poverty estimates for refugees in camp and out-of-camp refugees is challenging because many refugees receive in-kind assistance (such as housing provided to refugees staying in camps) to which it is hard to attach market value. Certain ad-hoc decisions had to be made to determine a poverty line for registered Syrian refugees. Sensitivity analyses confirmed that the observed pattern for monetary poverty was independent of these decisions leading to the noteworthy result that refugees living in host communities are more likely to be monetary poor than those living in camps.

Not only is the incidence of poverty higher out of camp, also the depth, and severity of monetary poverty are worse out of camp. This presents a conundrum: why do people who have the option to live in a camp and experience a lower likelihood of deprivation, decide against doing so? As measurement issues do not appear to drive this result, the chapter continues to explore whether monetary poverty is an adequate measure of refugee poverty, or whether other dimensions of deprivation should be considered. To this end a multidimensional poverty measure is calculated, which captures in addition to monetary poverty also deprivations with respect to education and access to services. Using the MPM helps reduce the poverty gap between refugees in and out of camp, but not completely. Those living in host communities remain (multidimensional) poorer.

The chapter then considers another dimension of well-being: freedom. It presents data representing different aspects of freedom and shows that refugees living out of camp tend to score better on this dimension. In the discussion that follows it is argued that for welfare measurement of refugees the multi-dimensional poverty measure, which is a composite of monetary poverty, educational attainment and access to infrastructural services, might have to be enlarged with a freedom dimension. There are several implications to be drawn from this chapter related to the measurement of poverty amongst refugees:

- Including an (abbreviated) consumption module in the VAF is feasible and worthwhile. In countries with sizeable refugee populations it would be preferable to include a refugee stratum in national surveys to allow for direct comparisons between host and refugee populations.
- To measure poverty for those who receive many benefits in-kind, such as refugees living in camp or camp-like situations, additional methodological work is needed to assess how this affects monetary measures of poverty.
- Monetary poverty alone, and even the multi-dimensional poverty index, may not satisfactorily capture welfare of refugees. An extended multi-dimensional poverty index that includes a freedom dimension seems more appropriate, and future welfare surveys may want to consider capturing this dimension. Additional research is needed to determine how to best do so.

The most important finding of this chapter is the high degree of deprivation amongst Syrian refugees: 62 percent of refugees living in host communities, and 45 percent of Syrian refugees living in camps are monetary poor.

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item	Share of food	Daily consumption per capita	Daily calories consume per capita (adjusted)	Median unit price	price per calorie	cost	Share of cost	Share of calorie
Apples	0.32	0.004	2.12	1.000	1.887	0.1215	0.727	0.092
Bananas	0.33	0.003	3.01	1.000	1.070	0.0979	0.586	0.131
Beans	1.34	0.010	28.05	0.001	0.000	0.0004	0.002	1.220
Biscuits	0.50	0.003	11.33	0.002	0.001	0.0002	0.001	0.493
Bread	16.53	0.363	944.09	0.400	0.154	4.4207	26.461	41.047
Cheese	0.74	0.003	9.33	3.000	0.854	0.2425	1.451	0.406
Chicken	5.17	0.027	34.57	2.000	1.572	1.6528	9.893	1.503
Chips	1.03	0.003	15.85	0.004	0.001	0.0004	0.002	0.689
Chocolate	0.12	0.009	46.42	0.200	0.040	0.0560	0.335	2.018
Cucumbers	2.68	0.055	9.46	0.500	2.924	0.8416	5.037	0.411
Dates	0.43	0.002	4.87	0.002	0.001	0.0001	0.001	0.212
Eggs	3.91	0.431	24.12	0.092	1.637	1.2012	7.190	1.049
Fish	0.69	0.001	1.90	0.625	0.328	0.0190	0.114	0.083
Frozen Fish	0.24	0.001	1.49	2.750	1.460	0.0659	0.395	0.065
Garlic	2.12	0.003	4.77	0.008	0.005	0.0008	0.005	0.208
Grapes	0.61	0.011	3.55	0.650	1.940	0.2094	1.254	0.154
Greens	0.82	0.011	3.06	1.400	5.192	0.4836	2.895	0.133
Hummus	0.19	0.002	3.11	1.000	0.692	0.0654	0.391	0.135
Ice-cream	0.35	0.035	88.49	0.100	0.039	0.1051	0.629	3.847
Infant Milk	2.38	0.003	13.70	0.011	0.002	0.0009	0.005	0.596
Juice	0.47	0.008	3.64	0.800	1.667	0.1847	1.106	0.158
Labneh	1.86	0.006	3.48	0.004	0.006	0.0006	0.004	0.151
Lemons	0.70	0.007	2.57	1.000	2.857	0.2232	1.336	0.112
Macaroni	1.62	0.015	53.77	0.001	0.000	0.0005	0.003	2.338
Mandarins	0.06	0.001	0.73	0.700	1.333	0.0298	0.178	0.032
Margarine	0.78	0.002	15.05	0.004	0.000	0.0002	0.001	0.654
Meat	2.96	0.005	10.19	5.000	2.632	0.8156	4.882	0.443
Milk	0.08	0.001	0.58	0.900	1.299	0.0230	0.138	0.025
Nuts	0.03	0.000	0.60	4.000	0.708	0.0130	0.078	0.026
Oil	5.77	0.027	243.59	0.002	0.000	0.0016	0.010	10.591
Onions	2.05	0.044	17.29	0.500	1.276	0.6706	4.014	0.752
Oranges	0.15	0.002	1.15	0.625	1.330	0.0466	0.279	0.050
Other Spices	1.77	0.003	10.45	0.007	0.002	0.0006	0.004	0.454
Peaches	0.13	0.003	1.07	0.667	1.626	0.0528	0.316	0.046
Potatoes	3.24	0.069	45.11	0.500	0.762	1.0458	6.260	1.961
Powder Milk	2.91	0.006	32.09	0.005	0.001	0.0010	0.006	1.395
Rice	7.28	0.073	252.66	1.000	0.288	2.2115	13.237	10.985
Salt Pepper	0.69	0.005	15.17	0.002	0.001	0.0002	0.001	0.660
Soda	0.15	0.003	1.16	0.600	1.395	0.0491	0.294	0.050
Sugar	4.30	0.066	262.15	0.001	0.000	0.0013	0.008	11.398
Tahini	0.24	0.001	3.49	0.004	0.001	0.0001	0.000	0.152
Tomatoes	4.12	0.139	30.06	0.350	1.620	1.4816	8.868	1.307
TomPuree	1.25	0.007	2.70	0.002	0.005	0.0004	0.002	0.117
Watermelon	0.74	0.028	9.24	0.313	0.944	0.2655	1.589	0.402
Yogurt	5.18	0.049	28.72	0.001	0.002	0.0019	0.011	1.249

The Economic Impacts of the Syrian Refugee Migration on Jordan: An Integration Perspective

CHAPTER 2.6

The Economic Impacts of the Syrian Refugee Migration on Jordan: An Integration Perspective[45]

Juan Segnana
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Raymond Robertson
Jaime Alfonso Roche Rodriguez

Abstract

The start of the Syrian Civil War in 2011 led to a substantial influx of refugees into Jordan, with over 660,000 Syrians arriving by 2015. More than half of these refugees were of working age. We show Syrian refugees have less education than their Jordanian counterparts and policies attempted to help them assimilate into manufacturing. In our study, we test two hypotheses related to refugee assimilation. The first hypothesis examines the 2016 Jordan Compact (JC) with the European Union (EU), which aimed to integrate Syrian refugees and improve Jordan's export profile with simplified Rules of Origin (ROO) for certain industries. If the Jordan Compact was effective, we would expect to see a relative increase in exports to the EU compared to other regions. The second hypothesis suggests that the successful integration of Syrian workers in the manufacturing sector contributed to a boost in manufacturing exports to all destinations relative to other exports. We conduct a gravity difference-in-differences analysis to evaluate these two hypotheses. We find little, if any, evidence supporting the first hypothesis but strong support for the second. These findings suggest that while the simplified Rules of Origin had limited impact on exports to the EU, the Jordanian government effectively integrated Syrian workers into the manufacturing sector. Labor force surveys indicate that a skill mismatch impeded the integration of Syrian workers into industries targeted by the Jordan Compact, but refugees were successfully assimilated into the manufacturing industry.

Editors' Note: *This chapter situates Jordan's experience within an integration-plus-trade lens. It shows that the Jordan Compact—through targeted cooperation with the EU—helped integrate Syrian refugees into manufacturing jobs, supporting host-economy stability. Yet the EU rules-of-origin relaxation did not deliver the expected pivot in Jordan's export basket, indicating that regulatory easing alone is insufficient. The takeaway is a dual agenda: sustain domestic labor-market integration while pairing it with trade and deeper structural reforms aligned to Jordan's economic capacities and constraints.*

45 This chapter is adapted from Segnana et al.'s (2024) working paper published in the World Bank Policy Research Working Paper Series (available at https://openknowledge.worldbank.org/server/api/core/bitstreams/6ec98d33-6ee2-4199-8f3b-ffe5b2c3ff57/content). The content has been slightly modified for inclusion in this volume.

Introduction

As immigration and refugee flows increase, recipient nations are increasingly pressured to understand how the labor force absorbs immigrants and refugees. How immigrants are absorbed into the labor force has implications for native support for immigrants/refugees, government resources dedicated to supporting unpaid migrants, and economic growth. The increase in labor supply can be absorbed successfully (with minimal domestic wage and employment impacts accompanied by economic growth) if the economy is sufficiently diversified.[46] Increasing exports is important because most recipient nations are too small to affect global prices and, by exporting, they can avoid the "Dutch Disease" effect of driving down domestic wages and employment through the increase in domestic production and labor-market competition. In other words, an increase in exports is often synonymous with an increase in labor demand.

In this paper, we focus on Jordan's experience receiving over 660,000 Syrian refugees during the early years of the Syrian Civil War from 2011 and 2015. Recognizing the important potential of exports to increase labor demand and facilitate Jordan's ability to absorb the influx of migrants, the EU and the Hashemite Kingdom of Jordan entered into an agreement known as the Jordan Compact (JC) in 2016. The JC includes two measures to facilitate Jordan's export growth during the influx of migrants. The first measure focused specifically on exports to the EU by simplifying "rules of origin" that define what products are considered "made in Jordan". Relaxing these rules makes it easier for Jordan to expand exports by increasing access to foreign inputs and reducing trade costs (Abreha and Robertson 2023). The second measure focused on cooperation to help refugees assimilate and find jobs through better access to education, and attracting investment designed to enhance the resilience of both Jordanian host communities and Syrian refugees.

Evaluating the effects of these two measures is both important and straightforward. For the first measure, we evaluate the hypothesis that the EU-specific part of the JC that relaxed rules of origin for Jordan's exports to the EU would have shifted Jordan's export basket towards the EU. In the second measure, the cooperation between Jordan and the EU to facilitate immigrant assimilation resulted in a higher share of migrants working in manufacturing than the share of natives working in manufacturing. Therefore, we evaluate the hypothesis that Jordan's export basket would have shifted towards manufacturing following the JC relative to other sectors.

Our approach towards evaluating both hypotheses relies on a difference-in-difference gravity model approach. Our results provide little if any support for the first hypothesis but strong and significant support for the second. The results suggest that the coordination between the EU and Jordan successfully supported migrant assimilation into the labor force generally and particularly in manufacturing. But relaxing the rules of origin had very little, if any, effect on expanding exports from Jordan to the EU.

This paper contributes to studies on the socioeconomic impact of large-scale refugee movements on host countries. This includes literature on refugee crises, refugee integration, and the economic implications of forced migration (Betts and Collier, 2017; Dustmann et al., 2017; Brell et al., 2020). This study adds to the integration of minorities into local labor markets (Bertrand and Mullainathan, 2004; Charles and Guryan, 2008; Heath et al., 2013; Bartos et al., 2016; Hedegaard and Tyran, 2018) focusing for the first time on the integration of refugees in export-oriented industries. Expanding exports might also occur if policies are in place to help refugees overcome the universal problem of finding jobs that are appropriate for refugee skills.

Refugee crisis and refugee assimilation

As of 2024, Jordan hosts approximately 1.3 million Syrians, with nearly 670,000 registered as refugees with the United Nations High Commissioner for Refugees (UNHCR). Most of these refugees live outside camps in urban and rural areas, while a smaller portion resides in refugee camps like Zaatari

46 Neoclassical trade theory shows that migration that does not move a country outside of its diversification cone will have no effect on wages of natives.

and Azraq. Over 80% of Syrian refugees in Jordan live in host communities, particularly in cities like Amman, Irbid, and Mafraq. Camps such as Zaatari, which has become one of the world's largest refugee camps, host tens of thousands of people but represent a fraction of the total Syrian refugee population in Jordan.

While the integration of refugees into the labor market has had positive economic effects, including increased consumer demand (Rozo and Sviatschi, 2018) and labor force participation (Fakih and Ibrahim, 2016), it has also placed additional pressure on public services and infrastructure (Alhawarin et al., 2021; Rozo and Sviatschi, 2021). Access to education has been a significant issue, with many Syrian children facing challenges in enrolling in Jordanian schools. The labor market has been affected, with some Jordanians perceiving refugees as competitors for jobs, especially in the informal sector. Employment opportunities for refugees are limited, with legal restrictions on work permits for certain sectors. In this context, the government of Jordan worked hard in the assimilation process of refugees, integrating them into the labor market through special work permits and initiatives.

The Jordanian government has implemented several policies and initiatives to assimilate Syrian refugees into the labor market, recognizing the economic and social challenges posed by the large refugee population. These efforts have been shaped by domestic needs and international pressures, with the aim of balancing the needs of the refugees with the country's economic realities.

The Jordan Compact

The Jordan Compact (JC) was a landmark agreement between Jordan and the international community, particularly the EU and donor countries. In exchange for significant financial aid, trade concessions, and investment opportunities, Jordan agreed to improve access to its labor market for Syrian refugees. As part of the JC, Jordan committed to issuing up to 200,000 work permits to Syrian refugees. This was a significant policy shift, as work for refugees was previously restricted. The permits allowed Syrians to work in specific sectors, including agriculture, construction, manufacturing, and services. The Compact also included the creation of special economic zones where companies could employ Syrian refugees, often in exchange for preferential access to European markets.

Simplification of Work Permits Procedure

The Jordanian government simplified the process for obtaining work permits, reducing fees and eliminating some bureaucratic hurdles. Mobile units were also deployed to refugee camps and urban areas to facilitate the issuance of permits. Jordan introduced flexible and sector-specific work permits, which allowed Syrian refugees to work in various jobs within certain sectors without the need for employer sponsorship. This made it easier for refugees to find and switch jobs. However, work permits are still largely restricted to low-wage, labor-intensive sectors, limiting opportunities for many skilled refugees. Moreover, despite the availability of work permits, about 2/3 of Syrian refugees continue to work informally, often due to the mismatch between their skills and the available jobs, or the perceived complexity of the work permit process.

Sector specific initiatives

The agricultural sector has been one of the most accessible for Syrian refugees, with many permits issued for seasonal and regular agricultural work. The government worked with international organizations to promote the inclusion of refugees in this sector, where labor demand is high. The government of Jordan made focal efforts to integrate Syrians into the construction and manufacturing sectors, which are important to Jordan's economy. This included vocational training programs designed to match refugees' skills with market needs.

To motivate our data section, it is essential to understand the UN Statistics Division's (ISIC – HS) concordances, which link the International Standard Industrial Classification of All Economic Activities (ISIC) with the Harmonized System (HS). ISIC is a global standard for categorizing economic activities, providing a hierarchical structure that organizes industries based on their primary activities, and is used for various statistical purposes. Meanwhile, the HS, developed by the World Customs Organization (WCO), offers a standardized nomenclature for classifying traded goods, facilitating customs, trade, and tariff processes. The ISIC – HS concordances

bridge these two systems, enabling us to connect economic activities from Labor Force Survey (LFS) data (ISIC) to specific products in the UN COMTRADE data (HS), thereby enriching our analysis of economic activities and trade flows. Once the ISIC and HS codes are mapped, we can observe the employment allocation of workers across export-oriented industries and evaluate the JC's employment implications.

The Jordanian LFS is a survey implemented through four rounds on a yearly basis by the Jordanian Department of Statistics (DoS) and provides detailed information on various aspects of the labor force in the country. The survey covers about 16,500 households distributed over all governorates. Since 2017, the survey collects data that are representative of Jordanians and Non-Jordanians. As we cannot directly identify Syrians in the data, we proxy them as all non-Jordanians who arrived in Jordan after 2011 and have a refugee status. Furthermore, we define as other immigrants the rest of non-Jordanians. In so doing, we follow the standard approach previously used for conducting analyses on Syrian refugees using Jordan LFS at the Poverty Practice (World Bank, 2016).

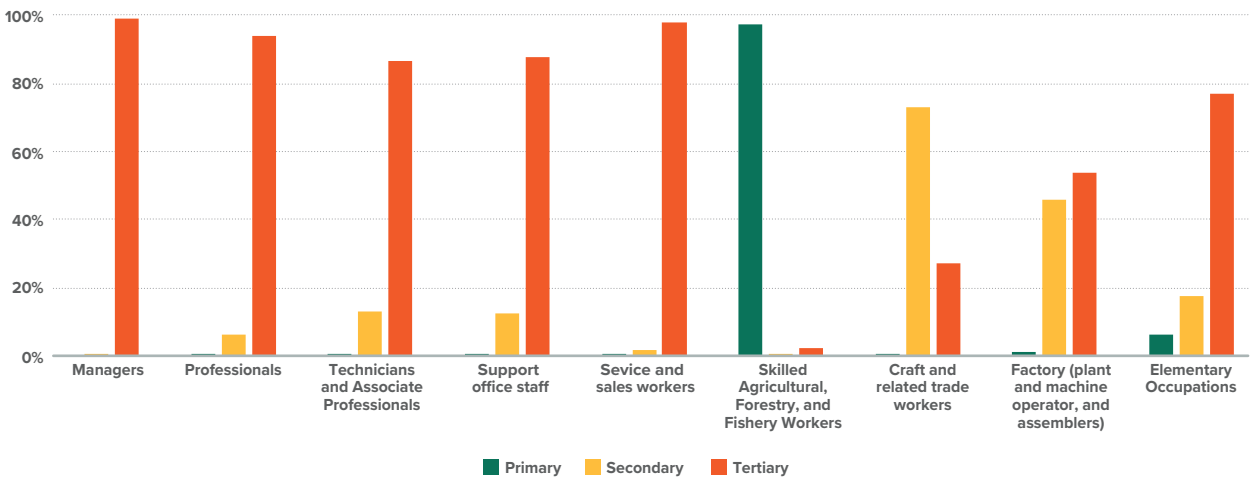
The LFS data covers a wide range of topics related to employment, unemployment, and labor force participation. It includes information about individuals' demographic characteristics, educational attainment, occupation, industry, employment status, and other relevant labor-related variables. For this study, we built a repeated cross-sectional dataset between 2017 and 2019. We harmonized industry codes to ISIC Revision 2 classification. We refer to other data sources and harmonization used for this study in the Appendix.

A sectoral disaggregation of occupations (ISCO) across sectors shows the tertiary sector absorbs most laborers in Jordan's employment structure. Consistently, further disaggregating the occupational categories by main industry shows most workers are engaged in the Community, Social, and Personal Services sector (see Figure 20 and Figure 21). This sector includes activities in Education Services, Health and Social Services, Public Administration and Defense, and Cultural and Recreational Activities, among others.

Jordan experienced a transformation in the allocation of employment across sectors between 2017 and 2019. Among those workers exposed to international trade, the shares of workers in *"Community, Social, and Personal Services"* increased year after year, reaching 76 percent in 2019, at the expense of employment in *"Financing, Insurance, Real Estate, and Business Services"*, as well as in *"manufacturing"* (see Figure 22).

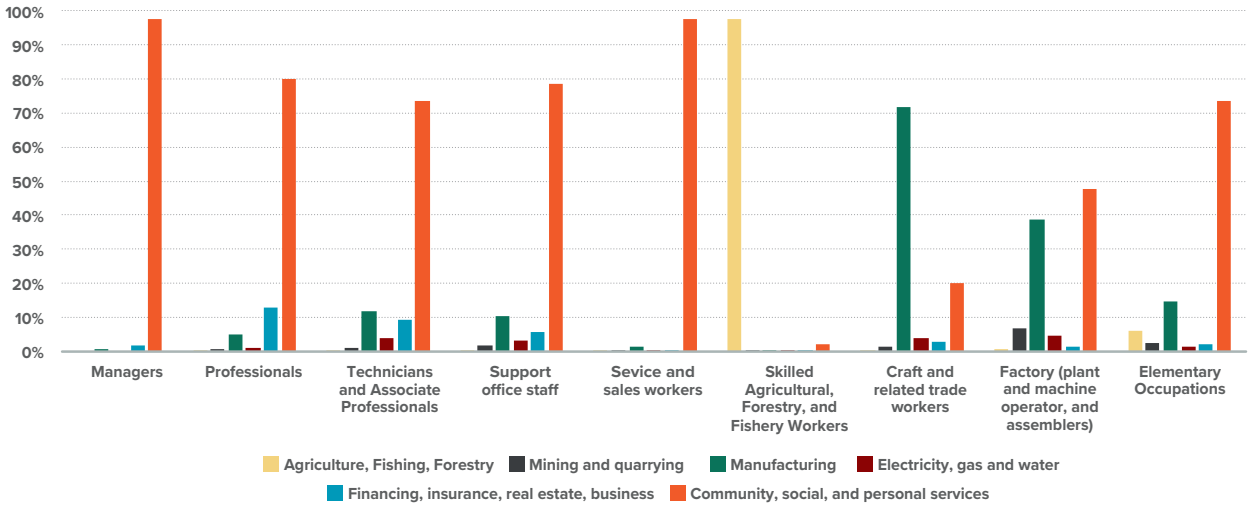
Although the JC contributed to the insertion of Syrian refugee workers in export-oriented industries, native employment was replaced by other immigrants in

FIGURE 20: Occupations, by broad economic sector



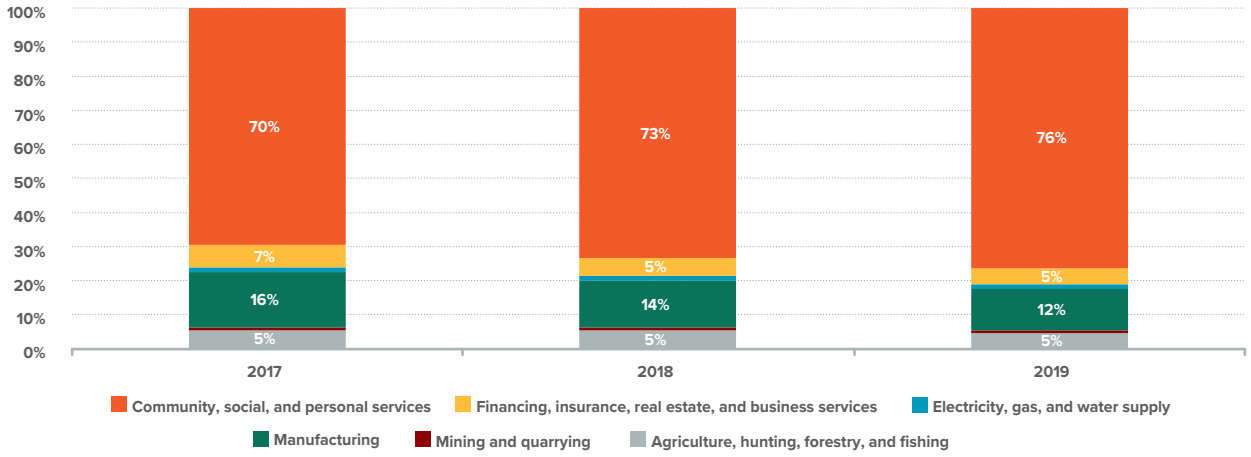
Source: Authors' elaboration using data from UNCOMTRADE and Jordan LFS 2017-2019.

FIGURE 21: Occupations, by industry



Source: Authors' elaboration using data from UNCOMTRADE and Jordan LFS 2017-2019.

FIGURE 22: Employment composition, by aggregate sector (2017-2019)



Source: Authors' calculations with data from Jordan LFS and UNCOMTRADE.

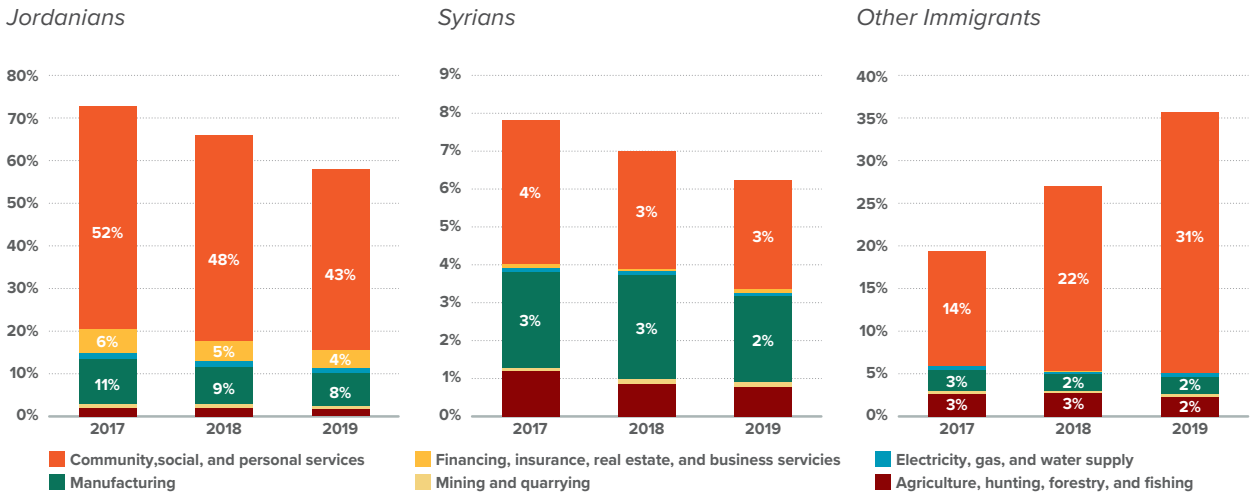
all sectors year after year.[47] More than 50 percent of employment in the *"Community, Social, and Personal Services"* is native, and it is almost equally shared with other non-Syrian immigrants. Syrian workers are underrepresented in all sectors, accounting for less than one in 20 workers, and most of them are in the *"Community, Social, and Personal Services"* and *"Manufacturing"*. On the other hand, other immigrants increased their participation, representing one in five workers in 2017 and one in three workers in the economy in 2019.

Syrian workers, although concentrated in the agricultural sector, also tend to specialize in manufacturing. This holds true for both genders, but more so for men. Figure 24 shows the ratio between the proportion of Syrian workers out of total Syrian workers and the proportion of Jordanian workers out of the total Jordanian workers for each of the sectors and genders. The trend even shows more specialization over time: this ratio for male workers in the primary sector decreased from 5.7 in 2017 to 4.7 in 2019 while in manufacturing this ratio increased from 2.0 to 2.5. Similarly, for the case of women, the ratio in manufacturing increased from 1.8 to 2.9.

47 Due to data limitations to identify Syrian refugees in the Jordan LFS we had to narrow the period of analysis to 2017-2020. These other immigrants are all respondents identified as non-Jordanians in the data who do not belong to the group of Syrian refugees. Presumably, most of these immigrants are Egyptians and Iranians.

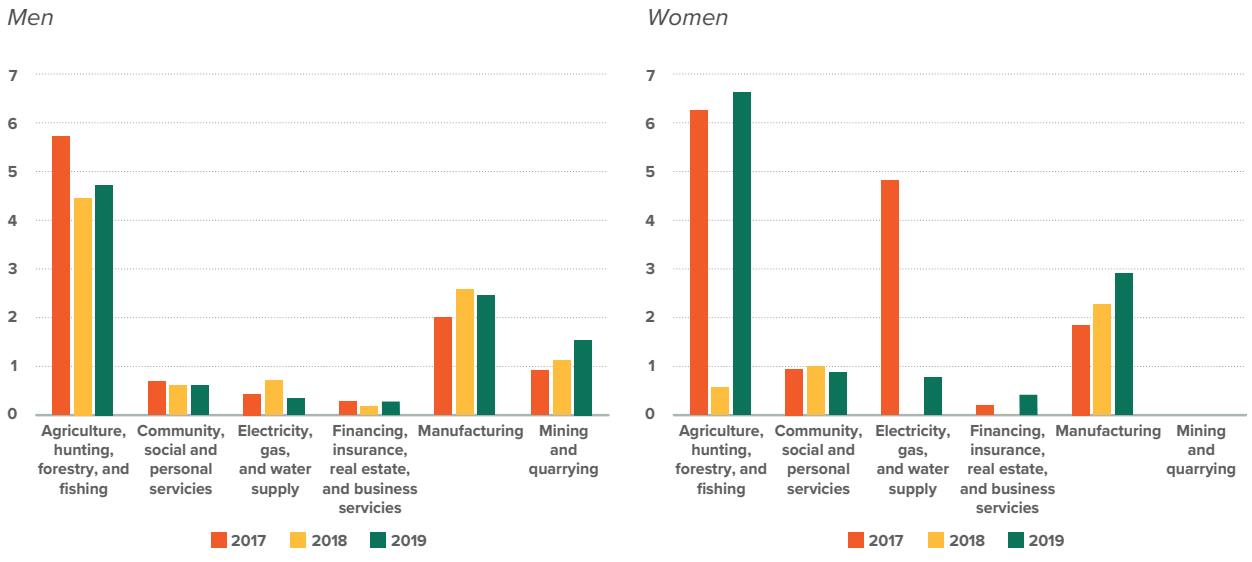
The limitations for Syrians entering the job market to a larger extent may stem from a skill mismatch, as highlighted in Visintin et al., (2015) and McGowan and Andrews (2015). Although Syrians of working age are less educated than their Jordanian counterparts (see Figure 27), this mismatch can manifest in highly educated Syrians performing low-skilled jobs and less educated Syrians struggling to compete. To analyze this, we can compare the distribution of Jordanians and Syrians across sectors for a given educational level. The distribution of native Jordanians can serve as a benchmark, reflecting the structural characteristics of the labor market. Significant differences in the allocation of Syrian workers, compared to Jordanians with the same educational background, would suggest a skill migration mismatch. Figure 25 and Figure 26 support this hypothesis: 66 percent of Jordanians in manufacturing, less than 8 percent in FIRE (Finance, Insurance, and Real Estate), and 25 percent in EGW (Electricity, Gas, and Water) have not completed secondary education. In contrast, 81 percent of Syrians in manufacturing, 36 percent in FIRE, and 91 percent in EGW have not completed secondary education, indicating a significant deviation from the structural benchmark.

FIGURE 23: Employment composition for Jordanian/Syrian refugees/other immigrants, by aggregate sector (2017-2019)



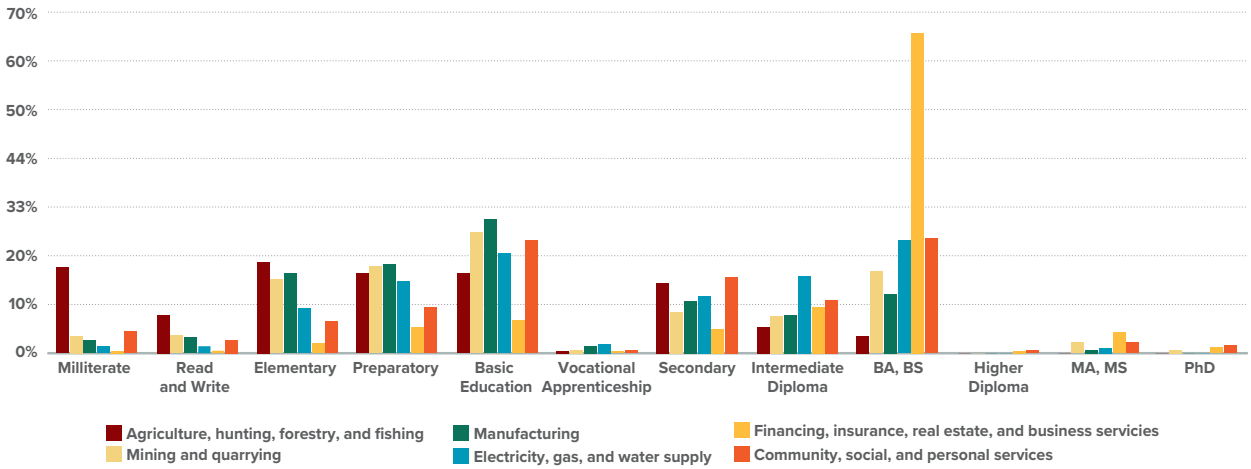
Source: Authors' calculations with data from Jordan LFS and UNCOMTRADE.

FIGURE 24: Relative Syrian prevalence, by sector and gender (2017-2019)



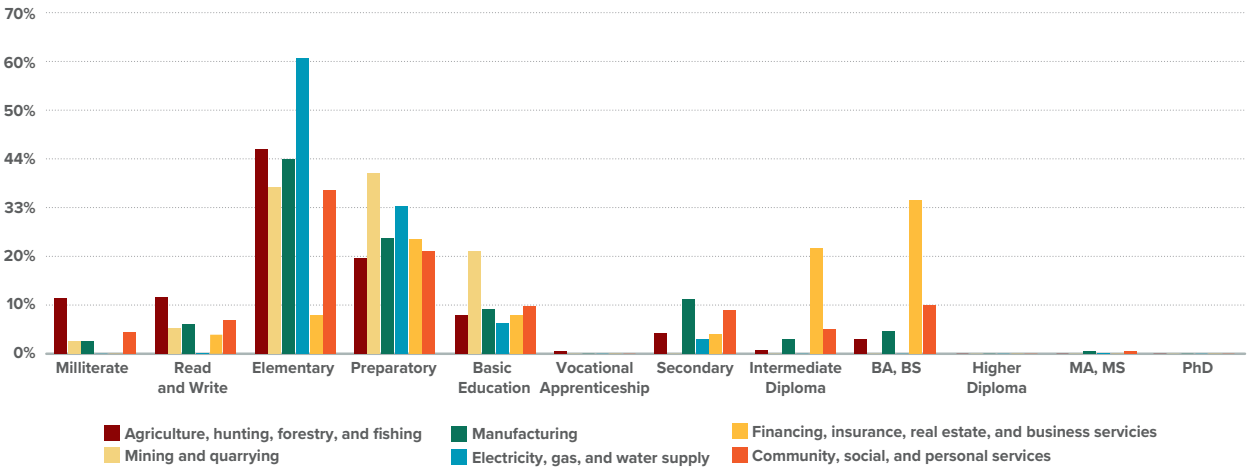
Source: Authors' calculations with data from Jordan LFS and UNCOMTRADE.

FIGURE 25: Education background of Jordanians, by sector (2017-2019)



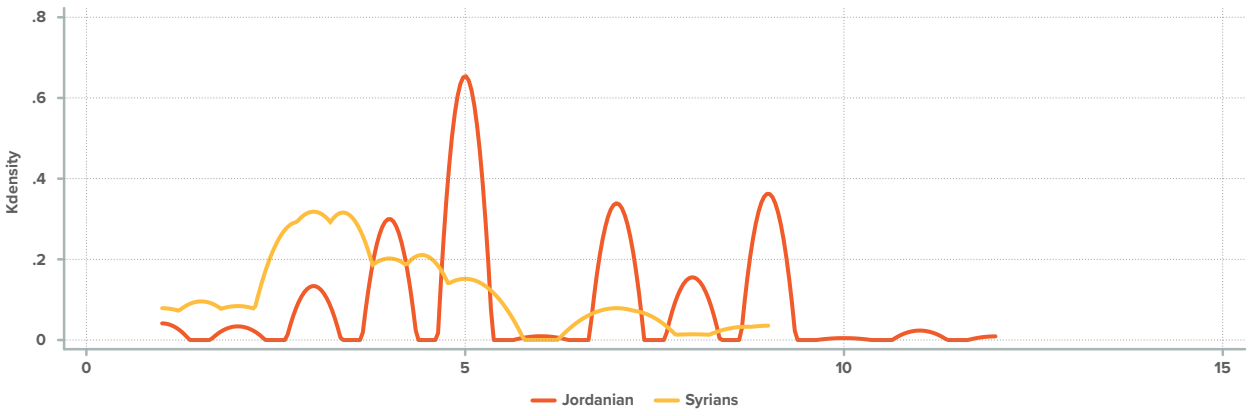
Source: Authors' calculations with data from Jordan LFS and UNCOMTRADE.

FIGURE 26: Education background of Syrian refugees, by aggregate sector (2017-2019)



Source: Authors' calculations with data from Jordan LFS and UNCOMTRADE.

FIGURE 27: Completed education levels for Syrians and Jordanians in working age (2017-2019)



Notes: Authors' calculations with data from Jordan LFS. Education levels increase by one from Illiterate to PhD as shown in Figures 6 and 7.

TABLE 23: Elasticity of substitution

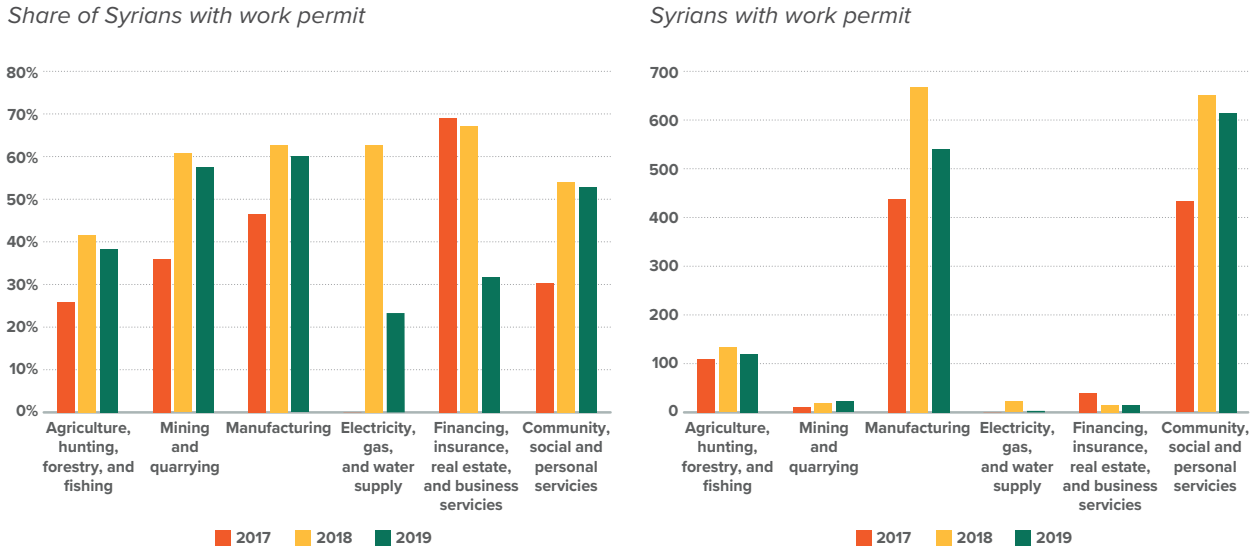
Sector	Sectoral Elasticity of Substitution	Elasticity of Substitution
Agriculture, hunting, forestry, and fishing	11.23	-2.33
Mining and quarrying	-0.72	
Manufacturing	2.80	
Electricity, gas, and water supply	-38.82	
Financing, insurance, real estate, and business services	-0.40	
Community, social, and personal services	2.88	

Notes: Elasticity of Substitution (EoS) = (% change Syrian employment) / (% change Jordanian employment). EoS > 0 => Inputs are Complements; EoS < 0 => Inputs are Substitutes. Authors' calculations with data from Jordan LFS and UNCOMTRADE 2017-2019.

The Elasticity of Substitution (EoS) is a measure that quantifies how easily one input can be substituted for another in the production process. In this specific context, the EoS is calculated as the percentage change in Syrian employment divided by the percentage change in Jordanian employment (EoS= $\frac{\%\ change\ in\ Syrian\ employment}{\%\ change\ in\ Jordanian\ employemnt}$). Therefore, positive EoS implies complements, but negative EoS implies substitutes. If employment increases (decreases) for both groups, they are complements (EoS>0), but employment increases (declines) for one but declines (increases) for the other, Syrians and Jordanians are substitutes (EoS<0). Table 23 shows estimate of the EoS of Jordanians and Syrians across sectors and for the whole economy. Although the aggregate EoS suggests Syrians and Jordanians are substitutes, this is not the case for workers engaged in the primary and manufacturing sectors.

There is a marked increase in the share of Syrian refugee workers in Jordanian export-oriented industries holding work permits. While the 2017 data reveal less than half of Syrian workers in each sector held a work permit, except for those working in FIRE, most of them held a work permit in 2018 and 2019. This result is in line with a better knowledge of the existence of the JC among the Jordanian and Syrian refugee populations. Unsurprisingly, the primary sector, with the largest Syrian refugee prevalence, has low rates of Syrian workers with work permits in 2018 and 2019 in comparison to other sectors.

FIGURE 28: Share of Syrian refugee workers with work permits, by aggregate sector (2017-2019)



Source: Authors' calculations with data from Jordan LFS and UNCOMTRADE.

Trade patterns

UN Comtrade

The UN Comtrade dataset, officially known as the United Nations Commodity Trade Statistics Database, is a comprehensive international trade database maintained by the United Nations Statistics Division (UNSD). This dataset provides detailed information on global merchandise trade, encompassing the import and export of goods and services between countries and regions. In this study, we limit the analysis to trade in merchandise only, since data on trade in services are very limited. Moreover, following the standard convention in empirical trade studies, we use the value of imports reported by Jordan's trade partners to capture the value of Jordan's exports to its partners.

Trade trends provide insights into Jordan's economic health and growth prospects. Analyzing trade data helps understand how Jordan is integrating into the global economy, and which sectors are driving export growth. Moreover, understanding trade patterns helps Jordan identify opportunities to diversify its economy. Over-reliance on a few key exports or trading partners can make the economy vulnerable to external shocks. By analyzing trade trends, Jordan can strategize to broaden its export base and reduce dependency on specific markets.

Jordan has pursued a policy of trade liberalization in the past few decades. Between 1997 and 2024, Jordan signed eight trade agreements (see Table 24). The most important is the Pan-Arab Free Trade Area, signed in 1997 with the Middle East and North Africa (MENA) countries. In 2021, it accounted for a third of Jordan's total exports.

As a result of these agreements, Jordan's tariff rates have dropped sharply, from 18.9 percent in 2000 to 4.0 in 2020 (Figure 29). Even though trade openness (measured as the sum of exports and imports as a percentage of GDP) has historically been above a hundred percent (110.3 percent in 2000), it has been decreasing, hitting a low of 65.3 percent in 2020 (due to the pandemic) and reaching 81.4 percent in 2021 (Figure 30) toward pre-pandemic values.

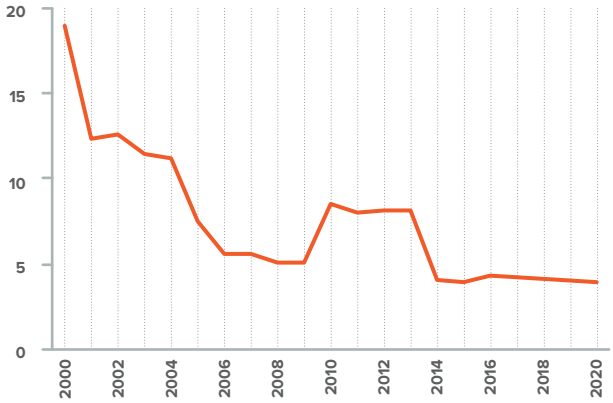
Unlike other developing economies that promoted trade liberalization, Jordan's export sector did not grow as expected. Total exports as a percentage of GDP dropped from 41.8 percent in 2000 to 36.7 percent in 2019 after peaking at 56 percent in 2008 (Figure 31). At the same time, imports have increased more than exports and total trade balance has become even more negative (Figure 32).

Table 24: Jordan's trade agreements

Agreement Name	Signature	Entry into force	Partners
Pan-Arab Free Trade Area (PAFTA)	01/19/1997	01/01/1998	MENA
EU – Jordan	11/24/1997	05/01/2002	EU, Jordan
United States - Jordan	10/25/2000	12/17/2001	Jordan, United States
EFTA Agreement	06/21/2001	09/01/2001	Iceland, Liechtenstein, Norway, Switzerland, Jordan
Agadir Agreement	02/25/2004	03/27/2007	Egypt, Jordan, Morocco, Tunisia
Jordan - Singapore	05/16/2004	08/22/2005	Jordan, Singapore
Canada – Jordan	06/28/2009	10/01/2012	Canada, Jordan
United Kingdom - Jordan	11/05/2019	05/01/2021	Jordan, United Kingdom

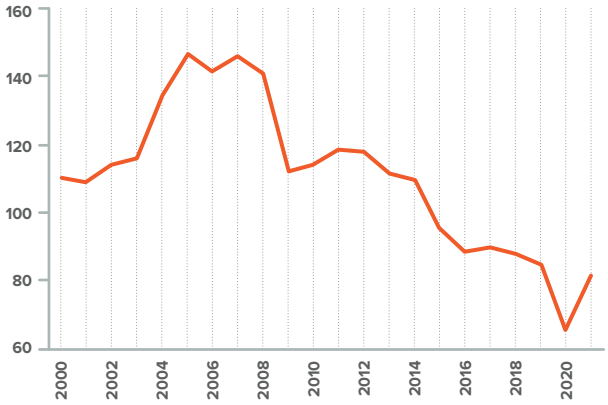
Source: World Trade Organization (WTO). WTO | Regional trade agreements.

FIGURE 29: Tariff rates considerably decreased tariff rate of all products in percentage



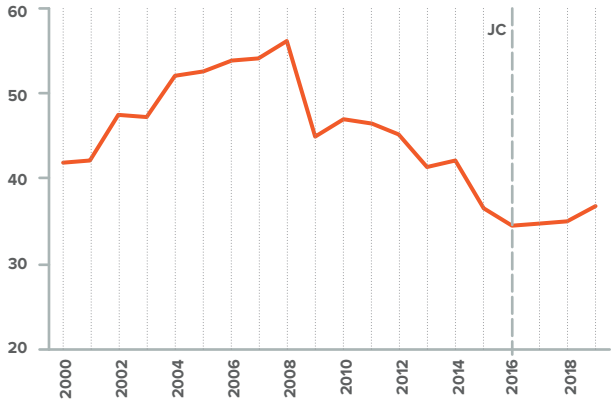
Source: Authors' elaboration using data from Our World in Data (https://ourworldindata.org/)

FIGURE 30: Trade openness also decreased total trade as percentage of GDP



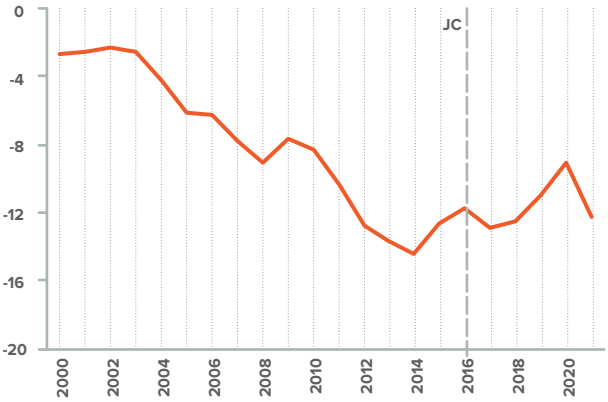
Source: Authors' elaboration using data from Our World in Data (https://ourworldindata.org/)

FIGURE 31: Exports decreased after 2008 Exports as percentage of GDP



Source: Authors' elaboration using data from the World Integrated Trade Solutions (https://wits.worldbank.org/). Black dotted line in the year of implementation of the JC.

FIGURE 32: Trade balance has remained negat Total balance, billions US$



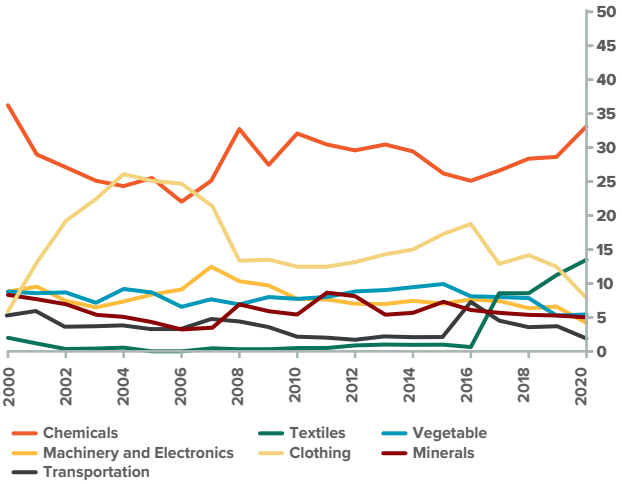
Source: Authors' elaboration using data from the World Integrated Trade Solutions (https://wits.worldbank.org/). Black dotted line in the year of implementation of the JC.

Export patterns remained relatively stable in terms of products exported as a share of total exports. Even though the export of chemicals (fertilizers and pharmaceutical) has held the largest share of exports for most of the time, in the period 2004-2006 textiles and clothing became the largest. However, these exports then fell before staging a slow recovery from 2008. Surprisingly, the number of products exported by Jordan has decreased nearly 22 percent from 2,606 products in 2000 to 2,021 products in 2021. Within Manufacturing, the main winner was the labor-intensive clothing sector, which increased from 6 percent of total exports in 2000 to 25 percent in 2007 and 9 percent in 2020 (Figure 33), while capital intensive textiles experienced a sharp increase after 2016 from less than 1 percent to 14 percent in 2020.

In terms of trading partners, the largest share of total exports continues to flow to countries within MENA. Regardless, the share of exports to the United States has surged from 3.5 percent in 2000 to 24.7 percent in 2021. Even though this share peaked in 2004 (26.2 percent), in recent years it has shown an upward trend increasing from 18.4 in 2015 to the previously mentioned 24.7 percent in 2021 (Figure 34). Export share to other regions, such as Europe, has remained relatively stable over time, accounting for 5.7 percent of total exports in 2021.

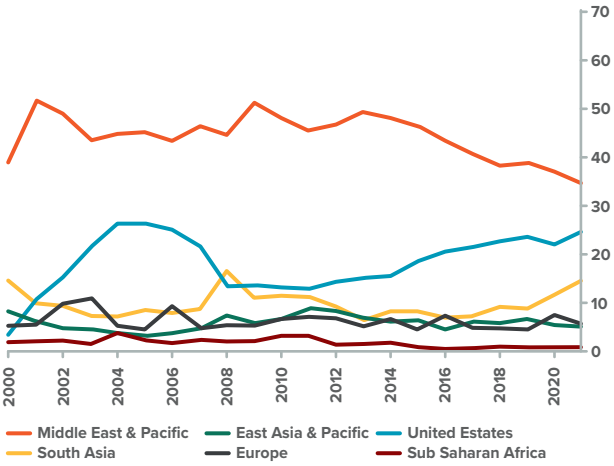
To disentangle whether the sharp increase in textile exports after 2016 can be related to the implementation of the JC, Figure 35 plots its trade trends by main trade partner. There is no evidence of an increase of textile exports to EU, and these results suggest Saudi Arabia drives the overall increase in Jordan's textile exports.

FIGURE 33: Share in total exports shifted from labor-intensive to capital-intensive industries
Percentage of total exports



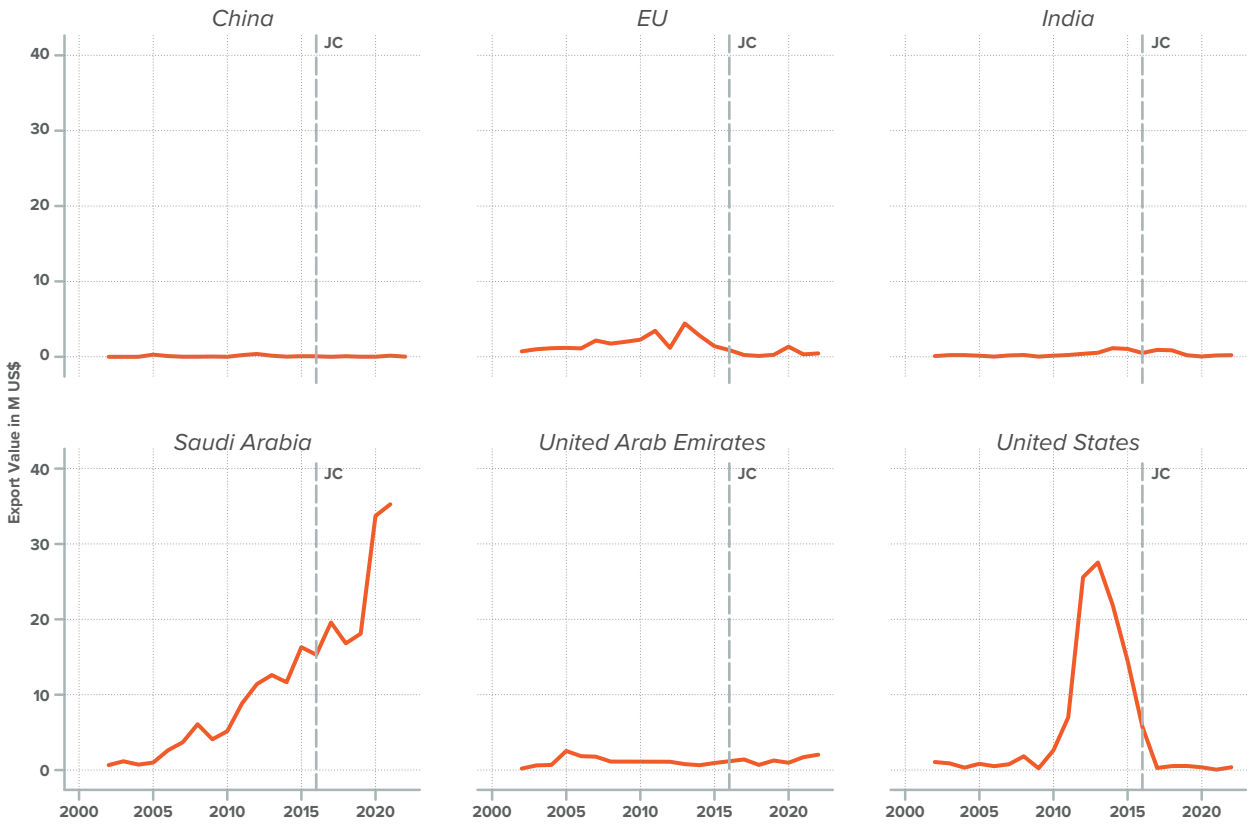
Source: Authors' elaboration using data from the World Integrated Trade Solutions (WITS). Product groups appear as reported by WITS.

FIGURE 34: Share in total exports increased for the United States
Percentage of total exports



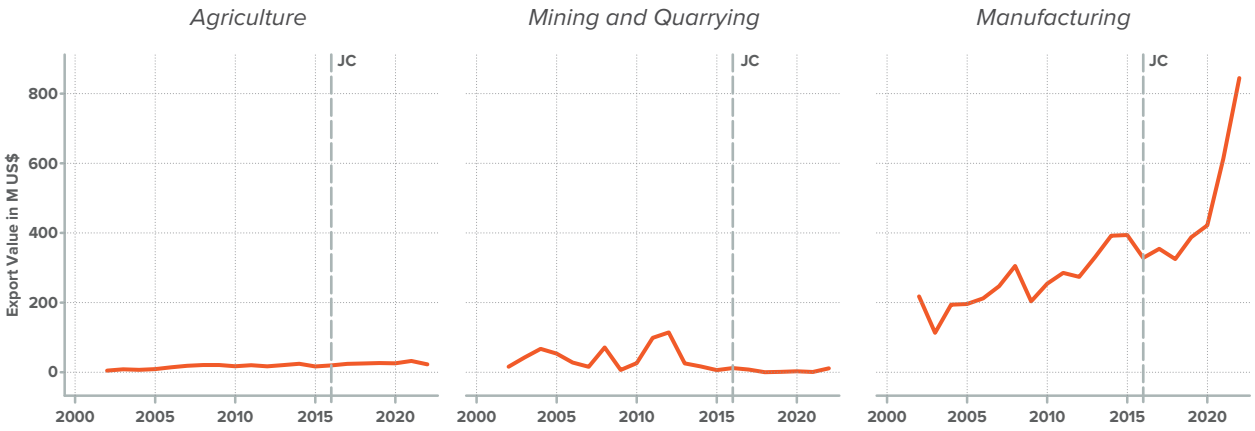
Source: Authors' elaboration using data from the World Integrated Trade Solutions (WITS). *Note:* Product groups appear as reported by WITS.

FIGURE 35: Jordan's manufacturing of textile exports by partner region



Source: Authors' elaboration using data from the World Integrated Trade Solutions (WITS).
Note: Product groups appear as reported by WITS. The vertical red dotted line splits the periods before and after the implementation of the JC.

FIGURE 36: Jordan's total export value to EU in Agriculture, Mining and Quarrying, and Manufacturing by Main Sector



Source: Authors' elaboration using data from the World Integrated Trade Solutions (WITS).
The vertical red dotted line splits the periods before and after the implementation of the JC.

Because of the US-Jordan FTA in 2000, the largest share of exports to the Unites States are textiles and clothing, but other sectors, such as chemicals, have surged in the past few years. There are interesting patterns when zooming in on the share of products exported from Jordan to the United States since 2015. While the textiles and clothing sector remains the highest exporting sector, accounting for 66.8 percent of total exports in 2021 (86.6 percent in 2015), the chemicals sector has gained relative importance, growing from 1.9 percent in 2015 to 16.4 percent in 2021. In terms of US$ value this means an increase from US$28 million to US$425 million in 2021 (textiles increased from US$1,251 million to US$1,544 million).

The impact of the JC on exports

The JC had a clear objective of boosting Jordan's exports to the EU. Figure 36 shows the evolution of Jordan's export value by main commodity sector. Only in manufacturing did the country experienced a sharp change in export values flowing to the EU zone after 2016. The observed change in trend was not immediately after the JC was implemented but took off in 2020-2021. Later in this study we suggest that a skill mismatch of Syrian workers may explain the weak integration of Syrian refugees in the labor market in the early days after the implementation of the JC, therefore affecting the effectiveness of the agreement in boosting targeted exports.

Evaluation of the hypothesis

The Jordan Compact

The JC was signed in February 2016 between the country of Jordan and countries in the EU as a response to the Syrian crisis.[48] The JC includes measures to stimulate economic growth and create job opportunities in Jordan, particularly in sectors that can absorb both Jordanian workers and Syrian refugees, facilitating Jordan's access to European markets, through the relaxation of rules of origin for Jordanian exports (Abreha and Robertson, 2023). To achieve these goals, the JC focused on boosting agriculture, construction, and manufacturing in Jordan by integrating Syrian refugees into 18 EU-focused Special Economic Zones (SEZs) to stimulate exports. In this study we focus on manufacturing industries, whose production in SEZs has tariff-free access to the EU market if: i) These industries have at least 15 percent Syrian employment. ii) 200,000 work permits for Syrians in SEZs are issued.

The JC faced several challenges to implementation. The first problem is that targeted sectors are typically informal sectors, affecting the issuance of work permits. In 2017, only two manufacturing companies in SEZs exported to the EU and only 60,000 permits had been issued. The number of export companies increased to 11 by 2021. Second, commuting constraints impede integration. SEZs

48 Include list of signing countries.

are far away from urban centers where the Syrian refugee population lives. The Jordanian government is aware of the commuting challenges faced by workers and is actively working on improving infrastructure to better connect urban centers and SEZs. Efforts to formalize sectors are also ongoing to facilitate better integration.

Approach

To assess the true impact of the JC in boosting Jordan's manufacturing exports to the EU we conduct a difference-in-differences regression analysis. Figure 19 suggests China is a natural control to use. Formally, we estimate the following regression equation

$$Export_t = \beta_0 + \beta_1 * Post_{2016} + \beta_2 EU_t + \gamma Post_{2016} * EU_t + \lambda X_t + \varepsilon_{it}$$

where $Export_t$ is the value of Jordan's exports in manufacturing at year t, $Post_{2016}$ is a dummy equal to one for year in 2016 and onwards, EU is a dummy variable equal to one if destination of exports is EU and zero if destination of exports is China in year t, and $Post_{2016} * EU_t$ is a dummy equal to one if exports flow to EU as of 2016. is the parameter of interest. X_t is the set of pre-trends controls. Robust standard errors at the country level. For the analysis, we exploit all data available in WITS disaggregated by sector and destination country, ranging between 2002-2022.

Hypothesis 1: EU exports relative to other countries

To study whether the JC was followed by an increase in exports relative to a comparison group of countries we overcame the identification challenge of heterogeneous impacts of rising exports. The empirical approach we implement is a gravity model. A gravity model is a framework used in economics and geography to predict and describe the flow of goods, people, or information between two locations. In this paper we use it to describe the flow of goods. Larger economies are assumed to have greater capacity to generate and attract flows. Physical distance is commonly used, but economic distance (e.g., trade barriers, cultural differences) can also be considered. In this paper, we use gravity to conduct a difference-in-differences analysis to move towards identifying impact. The model helps us to understand trade patterns and the impact of trade policies.

Table 25 reports the regression results. The second column reports estimation results with pre-trends controls. Although manufacturing exports to the EU are larger than those to China, and that exports significantly increased to both destinations after 2016, the causal effect of implementing the JC is not statistically different from zero in any of the specifications. When controlling for pre-trends the estimated coefficient of interest estimates a positive but insignificant impact.

TABLE 25: Difference-in-differences estimation results

	Value of Exports (M US$)	Value of Exports (M US$)
Post 2016	240.76***	240.76**
	(72.03)	(88.80)
EU	109.94***	47.49
	(32.62)	(29.30)
Post 2016 * EU	**-31.41**	**31.03**
	(103.48)	(124.84)
Observations	42	42
R-squared	0.484	0.552
Controls	No	Yes

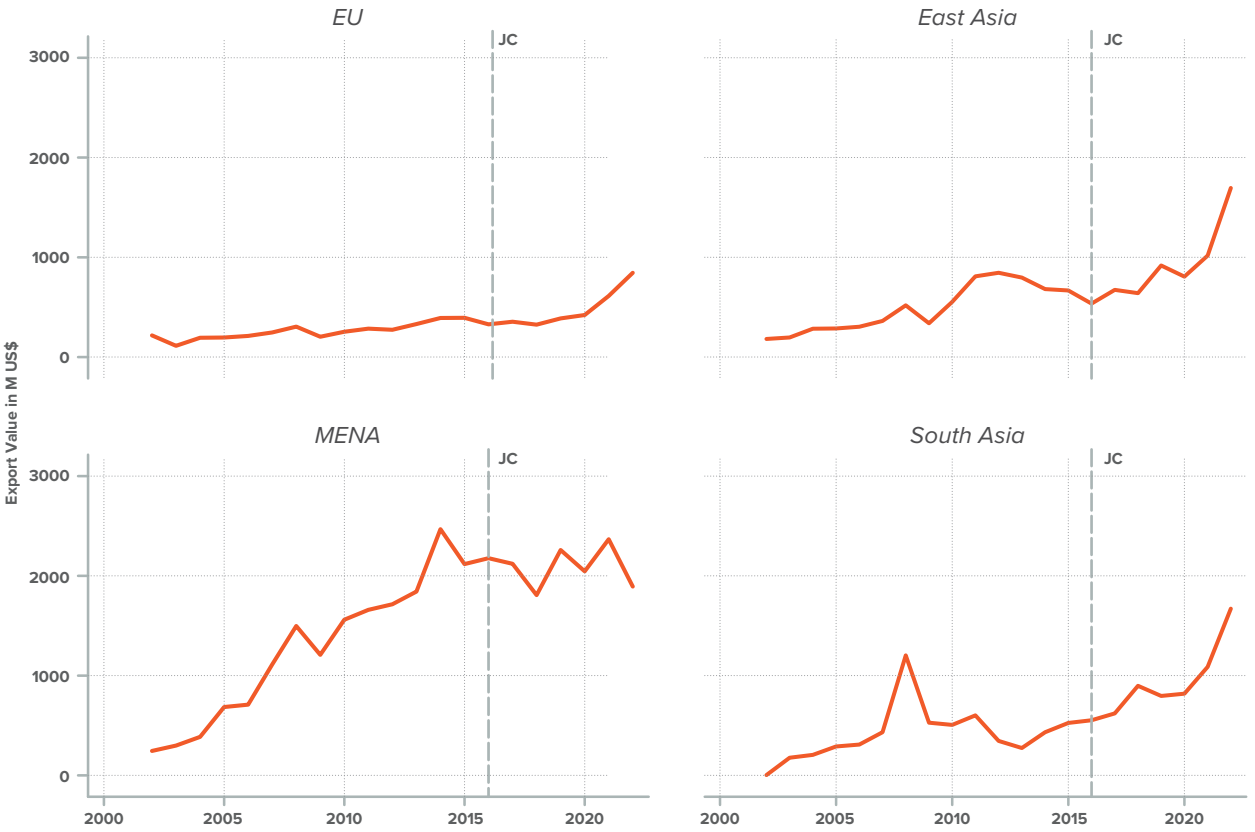
Notes: Robust standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1. Post 2016 accounts for a dummy variable equal to one for all years from 2016 onwards and zero otherwise; EU is a dummy variable equal to one if destination of exports is EU and zero if China; Post 2016 * EU is the interaction term and variable of interest.

Hypothesis 2: MFG exports relative to other sectors

As suggested by the descriptive evidence in the introduction, the Jordan government was successful in integrating Syrian refugees into manufacturing. Therefore, manufacturing exports should rise everywhere compared to other sectors. Figure 37 and Figure 38 reveal manufacturing exports increased to other main destinations after 2016, even to those destinations unaffected by the JC.

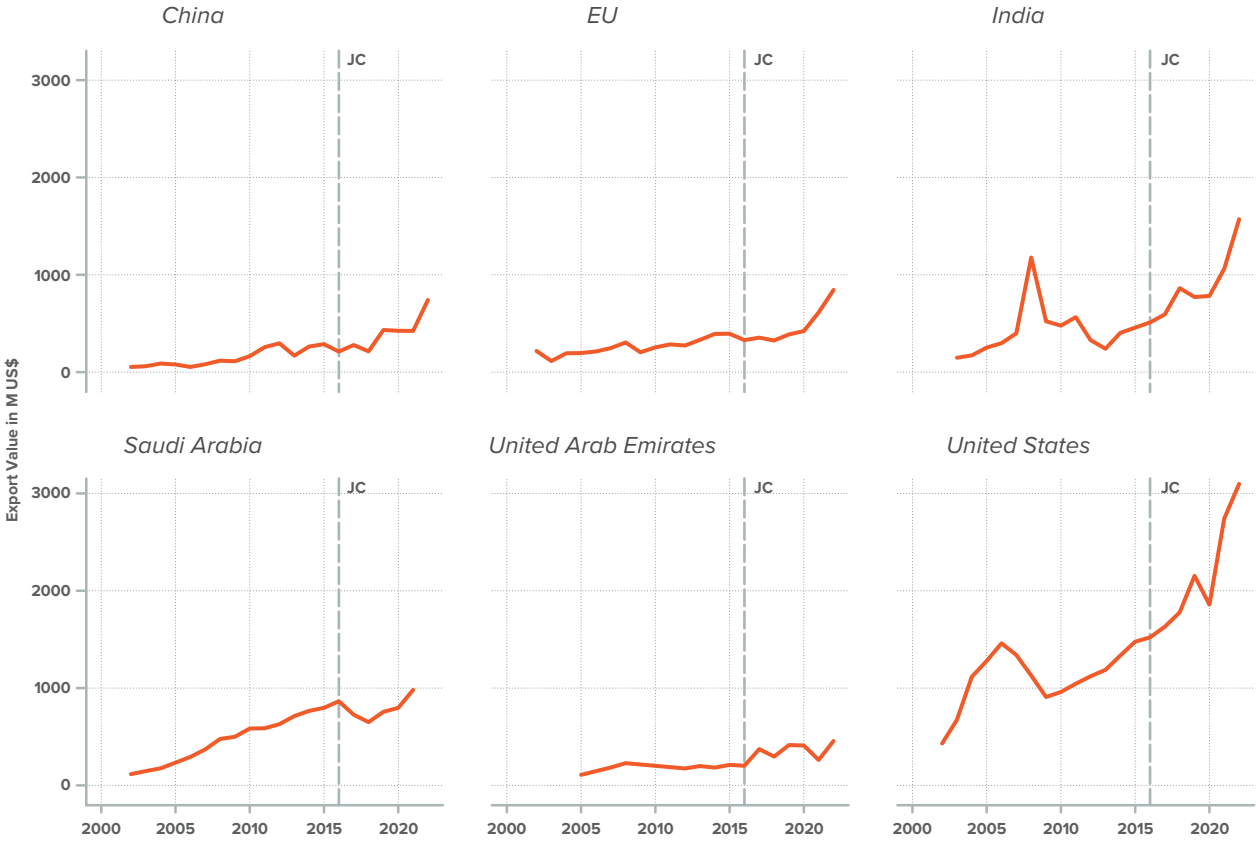
We assess the relative importance of the increase in manufacturing exports to Jordan's main trade partners relative to other sectors. We consider total manufacturing and non-manufacturing exports to the EU and other countries in Figure 38, the main group of Jordanian manufacturing importers. Figure 20 reports Jordan's total manufacturing and non-manufacturing exports to the EU and other countries in Figure 39.

FIGURE 37: Jordan's total export value in manufacturing by main region



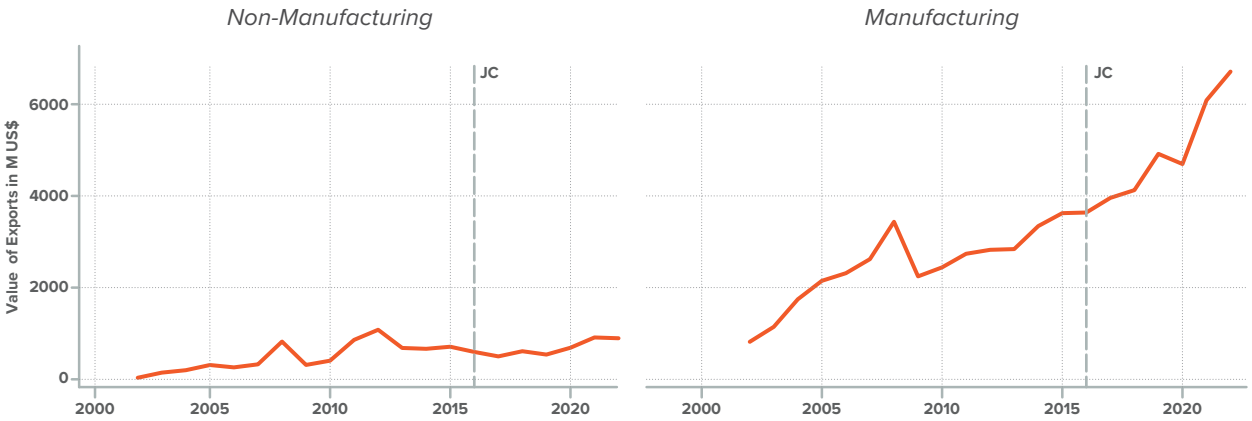
Source: Authors' elaboration using data from the World Integrated Trade Solutions (WITS).
The vertical red dotted line splits the periods before and after the implementation of the JC.

FIGURE 38: Jordan's total export value in manufacturing, by main trade partner



Source: Authors' elaboration using data from the World Integrated Trade Solutions (WITS). The vertical red dotted line splits the periods before and after the implementation of the JC.

FIGURE 39: Jordan's total export value in non-manufacturing and manufacturing to main trade partners



Source: Authors' elaboration using data from the World Integrated Trade Solutions (WITS). The vertical red dotted line splits the periods before and after the implementation of the JC.

TABLE 26: Difference-in-differences estimation results

	Value of Exports (M US$)	Value of Exports (M US$)
Post 2016	190.83*	190.83
	(104.35)	(128.65)
Manu	1961.92***	1661.47***
	(235.55)	(104.52)
Post 2016 * Manu	**2236.23*** **	**2536.69*** **
	(485.06)	(533.12)
Observations	42	42
R-squared	0.85	0.92
Controls	No	Yes

Notes: Robust standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1
Post 2016 accounts for a dummy variable equal to one for all years from 2016 onwards and zero otherwise; Manu is a dummy variable equal to one if exports are manufacturing exports and zero otherwise; Post 2016 * Manu is the interaction term and variable of interest.

We conduct a difference-in-differences regression analysis and formally test the following regression equation:

$$Export_t = \beta_0 + \beta_1 * Post_{2016} + \beta_2 Manu_t + \gamma Post_{2016} * Manu_t + \lambda X_t + \varepsilon_{it}$$

where is the value of Jordan's exports at year *t*, $Post_{2016}$ is a dummy equal to one for year *t* in 2016 and onwards, $Post_{2016} * Manu_t$ is a dummy variable equal to one if export category is manufacturing in year and zero otherwise, and is a dummy equal to one if exports flow is manufacturing exports as of 2016. γ is the parameter of interest. X_t is the set of pre-trends controls. Robust standard errors at the country level. For the analysis, we exploit all data available in WITS disaggregated by sector and destination country, ranging between 2002-2022.

There are positive and significant effects of rising manufacturing exports after 2016 relative to other sectors, in both specifications without and with pre-trends, by more than 2,000 million US$.

Conclusion

In conclusion, the experience of Jordan in absorbing a significant influx of Syrian refugees highlights the complex interplay between labor market integration and export-oriented economic strategies. The Jordan Compact (JC) serves as a critical case study demonstrating that targeted cooperation between a host country and external partners, such as the EU, can effectively facilitate refugee integration into the labor force, particularly in manufacturing sectors. This successful integration supports the broader economic stability of the host nation, as evidenced by the increased participation of refugees in manufacturing jobs, a sector that is crucial for economic growth and labor demand.

However, while the Compact's first set of measures—focused on enhancing refugee employment through education, investment, and community resilience—showed positive outcomes, the second set of measures, which aimed to boost Jordan's exports to the EU by relaxing rules of origin, did not yield the expected shift in Jordan's export basket towards the EU. This suggests that while domestic labor market integration can be effectively supported by international cooperation, translating this into broader export growth requires more than just regulatory easing. It may necessitate deeper structural reforms or additional supportive measures.

Overall, this study contributes valuable insights to the literature on refugee integration and the economic impact of forced migration, particularly in the context of export-oriented economies. It underscores the importance of comprehensive, multi-faceted approaches to managing large-scale refugee movements, emphasizing that successful economic integration of refugees requires both domestic labor market strategies and international trade policies that are well-aligned with the host country's economic capacities and challenges.

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Appendix

UN Statistics Division (ISIC-HS Concordances)

The UN Statistics Division (ISIC – HS) concordances refer to a set of tables or mapping systems that establish a link between two international classification systems: the International Standard Industrial Classification of All Economic Activities (ISIC) and the Harmonized System (HS).

ISIC is a global standard for classifying economic activities. It provides a hierarchical structure that categorizes industries based on their primary economic activities. ISIC codes are used for various statistical and analytical purposes to group economic activities into meaningful categories. ISIC codes exist under four different classifications and levels of disaggregation. In this study, we use the nine-sector classification consistent with Revision 2.

The HS is an international nomenclature developed by the World Customs Organization (WCO) for classifying traded goods. It provides a standardized way of categorizing products for customs, trade, and tariff purposes.

The ISIC – HS concordances serve as a bridge between these two classification systems, allowing us to link economic activities (ISIC) from the LFS data to specific products or goods (HS) in the UN COMTRADE data.

Closing Data and Evidence Gaps to Inform Socioeconomic Integration of Refugees: Insights from Kenya

CHAPTER 2.7

Closing Data and Evidence Gaps to Inform Socioeconomic Integration of Refugees: Insights from Kenya

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Laura Abril Rios Rivera
Esther Owelle
Caleb Gitau

Abstract

This chapter documents Kenya's efforts to close data and evidence gaps to inform the socioeconomic integration of refugees. With nearly 820,000 refugees and asylum seekers, Kenya faces the dual challenge of supporting displaced populations and promoting equitable development in underserved host regions. Through sustained collaboration between the World Bank, UNHCR, Center for Effective Global Action (CEGA), and the Kenya National Bureau of Statistics (KNBS), the country has developed an inclusive data ecosystem, culminating in the Kenya Longitudinal Socioeconomic Study of Refugees and Host Communities (K-LSRH). This nationally representative panel survey—part of the Kenya Analytical Program on Forced Displacement (KAP-FD)—uses UNHCR's proGres registry and innovative methodologies, including rapid consumption modules, disaggregated household interviews, and modules on psychosocial well-being and social cohesion.

A self-reliance framework guides the analysis, examining basic needs, socioeconomic resources, and resilience factors. Findings highlight major constraints to refugee self-reliance—such as limited mobility, employment restrictions, and psychosocial distress—and show wide variation in social cohesion and trust across locations. A concurrent randomized controlled trial assesses the impact of a mental health and livelihoods program.

The chapter emphasizes the importance of embedding refugee statistics into national systems, such as the upcoming Kenya Integrated Household Budget Survey (KIHBS), and of building institutional and research capacity. Key lessons include the need for reliable sampling frames, trusted local partnerships, context-sensitive survey design, and active stakeholder engagement. Kenya's experience offers a replicable model for generating high-quality, policy-relevant data to support the integration and resilience of forcibly displaced populations.

Editors' Note: *The Kenya case exemplifies the high quality of results that can be achieved when building upon the partnership and capacity born of many years of collaboration between the World Bank, UNHCR and the Government of Kenya. The data uses a local definition of hosts and a sample of refugees built from UNCHR's ProGres registry to generate longitudinal data to be able to draw actionable welfare insights.*

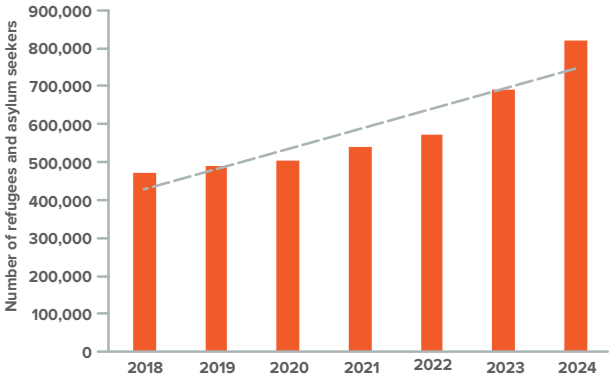
The Challenge

Kenya plays a crucial role as a host nation for refugees, home to some of the world's largest refugee camps. These camps primarily accommodate individuals displaced from neighboring countries due to prolonged conflicts, some spanning over three decades. As of November 2024, Kenya hosts nearly 820,000 registered refugees and asylum seekers[49], residing in designated camp areas and urban centers. The camps are Kakuma Refugee Camp and Kalobeyei Integrated Settlement in Turkana West Subcounty as well as the Dadaab Refugee Complex in Garissa County. Refugees are also found in urban areas like Nairobi, Mombasa, and Nakuru. According to estimates by the United Nations High Commissioner for Refugees (UNHCR), the Kakuma camp and Kalobeyei settlement together accommodate 297,258 individuals, while the Dadaab complex accommodates 413,595—constituting 36 percent and 51 percent of all registered refugees and asylum seekers in Kenya, respectively. Additionally, urban centers host 108,833 refugees, representing 13 percent of the total registered population. Established in 1991 and 1992 respectively, Dadaab and Kakuma camps rank among the five largest refugee camps in the world.

Refugee camps are in counties with historically low development indicators, limiting refugees' access to economic opportunities. The camps are in underdeveloped, arid, and semi-arid regions with inadequate infrastructure.[50] In 2021, Turkana, Kenya's northernmost county, had the highest poverty rate at 77.7 percent, with Garissa at 68.3 percent (Figure 41). These figures underscore the need for service delivery improvements for refugees as part of a broader strategy to reduce Kenya's spatial disparities and foster long-term self-reliance and resilience.

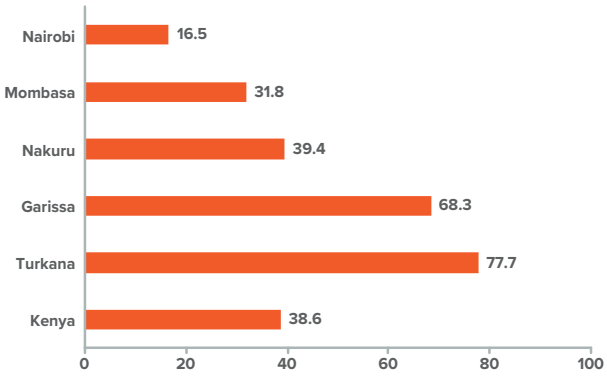
Kenya is taking steps to address the challenges faced by refugees, and data plays a crucial role in guiding these efforts. First, the country has transformed its national legal and policy environment by enacting the Refugee Act 2021 and publishing its accompanying regulations as well as the ongoing work on the upcoming policy framework known as the "Shirika Plan". The new Act, which replaces the 2006 Act, ensures refugees are issued with refugee identity cards and can open bank accounts and own SIM cards. It also specifies that refugees have the right to work, although this has been challenging to implement as refugees are required to have Class M permits per the Kenya Citizenship and Immigration

FIGURE 40: Trends in number of refugees and asylum seekers in Kenya



Source: UNHCR.

FIGURE 41: Poverty rate (%), 2021



Source: KNBS Poverty Report 2021; World Bank Kenya Poverty and Equity Assessment (2023).
Notes: According to the official national poverty lines produced by the Kenya National Bureau of Statistics (KNBS), an individual is considered poor if they live in a household with a monthly per adult equivalent consumption expenditure of Ksh 3,947 and Ksh 7,193 for rural and urban areas, respectively, in 2021 prices.

49 https://data.unhcr.org/en/documents/details/94275

50 While camp areas have historically been poor arid and semi-arid areas even prior to the establishment of camps, the report does not suggest a causal relationship between refugee hosting and poverty rates. Refugee presence may increase pressure on scarce resources but there is also evidence it attracts inflow of resources and creates new economic opportunities which improves conditions for hosting communities. Thus, the direction and magnitude of refugee presence on poverty is not straightforward.

Act 2011, and these are difficult to access. Second, the government is shifting from a humanitarian approach to an integrated settlement approach. With this approach, the emphasis is on refugees receiving support to become self-reliant rather than relying solely on humanitarian assistance during recovery and stabilization efforts.

Timely, high-quality, and comparable data is essential for informing evidence-based interventions and policies that enhance the welfare of refugees and their host communities. Refugees are a vital part of Kenya's social, cultural, and economic fabric, and understanding their socioeconomic conditions, needs, vulnerabilities, and potential is critical for effective policymaking. This chapter highlights efforts to bridge data and evidence gaps in support of this goal. It argues that for data to effectively guide policies and interventions aimed at improving the self-reliance and resilience of refugees and host communities, it must address three key questions: *(1) To what extent are refugees and host communities meeting their basic needs, and what resources are they using? (2) What barriers prevent sustained self-reliance? (3) What policy levers can support their path to self-reliance and resilience?*

This chapter documents the World Bank's collaborative efforts to build a comprehensive data ecosystem capable of answering key policy questions about refugees and host communities. It begins by outlining the evolution of the data landscape on displaced populations, highlighting the limitations and gaps that have hindered the development of evidence-based policies. The chapter then explores how the Kenya World Bank team, in partnership with UNHCR and various stakeholders—including government agencies, humanitarian organizations, and research institutions—is addressing these gaps through innovative data collection methods and strategic collaborations. It provides examples of how these efforts are translating into actionable insights that inform policy shifts aimed at integrating refugees into local economies and enhancing resilience. The discussion concludes by showcasing how recent data-driven initiatives are advancing socioeconomic integration, offering valuable lessons for other countries facing similar challenges. Ultimately, the chapter emphasizes the critical role of a robust data ecosystem in fostering refugee self-reliance and resilience, with broader implications for global displacement contexts.

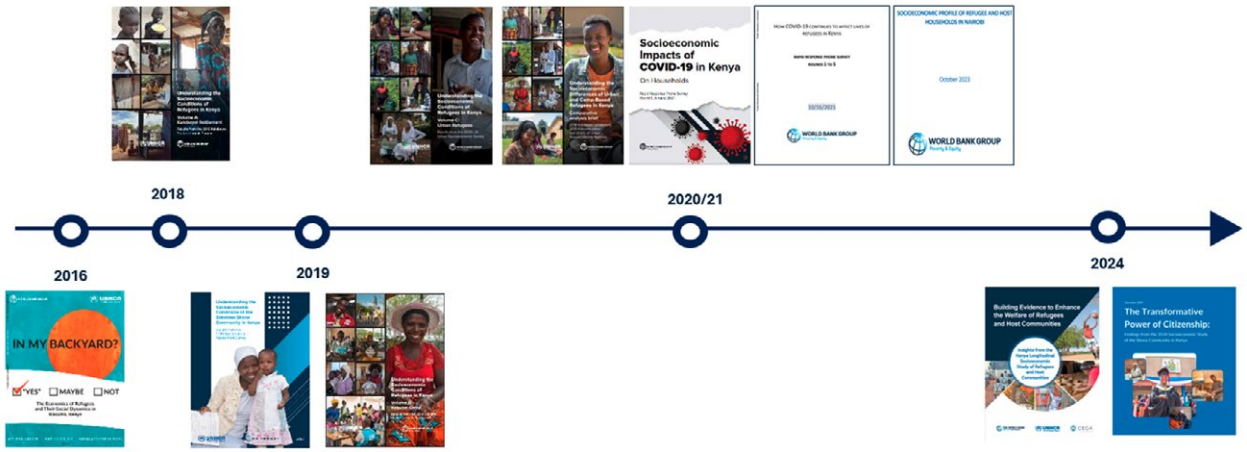
Steps to Close Data and Evidence Gaps

The Process

Since 2016, the World Bank and UNHCR, in collaboration with the Kenyan National Bureau of Statistics (KNBS) and the Center for Effective Global Action at the University of California, Berkeley, have partnered to assess the socioeconomic conditions of refugee communities in Kenya. This collaboration initially focused on generating robust data through location-specific surveys, including the Kalobeyei Socio-Economic Survey (2018), Kakuma Socio-Economic Survey (2018), Urban Socio-Economic Survey (2019), and the Refugee and Host Household Survey (RHHS) which followed a design similar to the Kenya Continuous Household Survey (2021), providing a comprehensive understanding of refugees' conditions in their respective areas. In response to the COVID-19 pandemic, eight rounds of rapid response phone surveys (RRPS) conducted in 2020 and 2021 assessed the pandemic's socioeconomic impact on refugees and host communities, revealing disproportionate challenges such as job losses, reduced access to healthcare and education, and increased food insecurity.

However, while these early efforts improved understanding of refugees' socioeconomic conditions, they had notable limitations. Most surveys excluded host communities or allowed only limited comparisons between the living conditions of refugees and hosts. Among the surveys, only the RHHS and the Kenya Rapid Response Phone Surveys (RRPS) included host communities. The RHHS, however, was limited to Nairobi, excluding representation of camps or other urban areas. The RRPS, while offering broader coverage, was restricted to individuals with registered phone numbers and included a reduced set of indicators due to its phone-based data collection method. Moreover, these studies relied purely on quantitative approaches, further limiting the depth of understanding. Additionally, socioeconomic conditions in Dadaab camp remained under-researched due to security challenges that restricted access. These gaps underscored the need for more inclusive, representative, and methodologically diverse approaches to better capture the complex realities of both refugees and host communities across Kenya.

FIGURE 42: Surveys conducted since 2016



Source: Authors' representation.

These early efforts highlighted two critical needs: generating comparable data across all population groups and establishing a sustainable data infrastructure to support long-term evidence-based decision-making. Ensuring comparability allows for a deeper understanding of relative living standards and enables policymakers to identify and address disparities more effectively. Equally important was the development of a longitudinal survey framework that could not only track changes in welfare over time but also be adapted to respond to evolving needs and emerging challenges. To achieve this, it was essential to create instruments that capture dimensions of welfare specific to displaced populations and their unique contexts. This endeavor required close collaboration among a diverse set of stakeholders to ensure the relevance, inclusivity, and sustainability of the data ecosystem.

Equipped with these insights the Kenya Analytical Program on Forced Displacement (KAP-FD) has been building a holistic approach —centered around collaboration, innovation in data collection and analysis, and sustainability of the data ecosystem. KAP-FD began in 2021 as a multi-year initiative to generate detailed socioeconomic panel data, evaluate interventions, and provide recommendations to enhance livelihoods for refugee and host communities. It comprises three main components: (i) Filling data and evidence gaps to inform solutions. (ii) Impact evaluation. (iii) Capacity building and collaboration. The insights gained from KAP-FD will contribute to evidence needs for policymaking and programs, including guiding private sector investment through targeted interventions. KAP-FD is funded by the Partnership for Improving Prospects for Host Communities and Forcibly Displaced Persons (PROSPECTS) of the Government of the Netherlands. In recognition of the importance of strong collaboration with stakeholders, the KAP-FD program is conducted with ongoing technical collaboration with UNHCR and the Center for Effective Global Action at the University of California, Berkeley. Team members from the collaborating institutions meet frequently to ensure knowledge exchange, rigorous design and implementation of survey instruments and analysis. These partnerships leverage the comparative advantage of various partners allowing them to not only share technical and financial resources but also bring diverse perspectives and expertise to the research process.

In addition to data production and analysis, KAP-FD has implemented a deliberate strategy to build local capacity and foster inclusion in national statistical systems, ensuring long-term sustainability. As part of this effort, KAP-FD has worked closely with the Kenya National Bureau of Statistics (KNBS) to enhance the national statistical system's ability to collect and use displacement data, including integrating refugees into the upcoming round of the Kenya Integrated Household Budget Survey (KIHBS). This collaboration reflects an incremental approach, developed through sustained engagement with KNBS as well as ongoing engagement with a broad range of development partners involved in displacement data production and use. In addition,

KAP-FD has facilitated, in the contexts of inclusion of refugees in the upcoming KIHBS, systematic collaboration between KNBS and the Department of Refugee Services (DRS), which oversees all administrative matters related to asylum seekers and refugees in Kenya. This approach not only ensures greater inclusivity but also strengthens the utilization of data in shaping policies and programs.

Building local capacity has extended to local researchers, with the aim of promoting empirical research on forced displacement. Specifically, in partnership with the African Economic Research Consortium (AERC), KAP-FD has supported local researchers to utilize data produced under its program, enhancing capacity for displacement-related research while ensuring wide usage of World Bank-supported survey data. These efforts are complemented by the development of a public "one-stop shop" dashboard, which provides governments and the global community with accessible and interactive forced displacement data. By combining capacity building, data accessibility, and inclusion, the initiative highlights the importance of integrating refugees into national frameworks and empowering local expertise to inform context-specific, evidence-based decisions.

The Result

A panel survey, known as the Kenya Longitudinal Socioeconomic Study of Refugees and Host Communities (K-LSRH), was designed to facilitate direct comparisons of socioeconomic conditions between refugees and host communities in both camp and urban areas. The sampling frame for refugees is based on UNHCR's population database (proGres). Covering 6,000 refugee households and 3,500 national households, the survey is representative of both camp-based and urban refugees, as well as Kenyans living in major refugee-hosting areas. It is the first representative survey of registered refugees in Kenya with comparable host-refugee data.[51] The survey allows for the measurement of rare events and tracks changes over time. The first wave of the panel survey was completed in June 2023, and the second wave began in March 2024.

Besides comparability and panel aspects, the survey contains several additional innovations. First, it includes modules on less understood themes such as psychosocial wellbeing, weather perceptions, social cohesion and children's test scores aiming to advance knowledge and programming in these areas. In addition to introducing new modules, special attention was given to tailoring questions with choice options relevant to refugee households. This also included providing clear prompts to enumerators to make the application of definitions to refugee settings clear. Second, besides interviewing a knowledgeable household member, for each household the survey systematically targets a woman, child, and another randomly selected household member. This approach provides a comprehensive understanding across gender and age profiles within households. It also allows linking in-depth child outcomes such as test scores to caregivers. Respondents were surveyed in Kiswahili, Turkana, Somali, Arabic, French or English. Thirdly, to lower the time and costs associated with collecting consumption data, the survey relied on the rapid consumption methodology (RCM). Under the design, a subsample of households was administered a full consumption module while the remaining households received a reduced rapid consumption module. After data collection, multiple imputation techniques are used to estimate the consumption aggregates of RCM households.[52] In addition, to deal with the fact that vulnerable populations might underreport consumption in hopes of getting more assistance, the questionnaire includes primers and subtle appeals to make the importance of honesty more salient which has been shown to improve underreporting among the most vulnerable.[53] Lastly, the survey is also currently being complemented by a new psychometric scale which is being piloted to assess factors that help

51 It covers (i) refugees in Kakuma camp, Dadaab camp and Kalobeyei settlement, (ii) refugees in urban areas of Nairobi, (iii) refugees in 'Other Urban areas' namely, Mombasa and Nakuru, and (iv) host communities drawn from households within 15 kilometers of the refugee camps and from urban neighborhoods where a large share of the urban refugees resides. The survey does not cover the small percentage (estimated at 6%) of refugees living outside target strata.

52 See Pape, U. 2020. Measuring Poverty Rapidly Using Within-Survey Imputations. World Bank Policy Research Paper. 9530; Takamatsu, S., Yoshida, N., Ramasubbaiah, R., & Fatima, F. (2021). *Rapid Consumption Method and Poverty and Inequality Estimation in South Sudan Revisited.* World Bank.

53 Kaplan, L., Pape, U., Walsh, J. (2020). Eliciting Accurate Consumption Responses from Vulnerable Populations. In: Hoogeveen, J., Pape, U. (eds) Data Collection in Fragile States. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-25120-8_11

BOX 4: Impact evaluation on a mental health and livelihoods program for refugees in Kenya

Rigorous impact evaluations on programs for refugees are still relatively rare but can be exceptionally valuable in understanding what works for this particularly vulnerable population group. Given the rising number of forcibly displaced people and the increasing strain on humanitarian budgets, it is more important than ever to identify the most effective support programs. To contribute to the growing evidence on the impacts of programs for refugees on wellbeing outcomes, the KAP-FD team is implementing a randomized controlled trial (RCT) on a mental health and livelihoods program.

Refugees often face numerous hardships, including a lack of economic opportunities, vulnerability to shocks, and poverty. Additionally, they are particularly susceptible to psychological distress due to traumatic experiences, challenging camp or transit situations, loss of family members, and uncertainty, while their access to mental health services is low. Relatedly, the first wave of K-LSRH shows that 46.1 percent of adult refugees across Kakuma Refugee Camp and Kalobeyei Settlement show at least mild symptoms of depression or anxiety, and only 11.6 percent are working.

The RCT examines the interaction between the economic and psychological wellbeing of camp-based refugees in Kenya and evaluates how both dimensions are impacted by a program bundle, including: (i) An unconditional cash transfer of about $500. (ii) A psychoeducation and financial literacy training. The program and related data collections were completed in late 2024, and analysis has started. The results will provide insights into the need for psychosocial support services, the effectiveness of programs in improving both psychological and economic outcomes and offer recommendations for expanding mental health services for refugees, particularly within livelihoods-focused programs.

refugees and hosts to overcome challenges and thrive in the face of adversity. In addition, an impact evaluation is being implemented to shed light on the effectiveness of a mental health and livelihoods program for refugees (see Box 4).

To enhance the use of data in decision making, KAP-FD has been convening stakeholders to discuss the results and implications of the analysis. To this end, the Government of Kenya via the Department of Refugee Services (DRS), the UNHCR, and the World Bank convened a research forum to advance the national development around Kenya's refugee hosting agenda. It brought together high-level representation from the national government, non-governmental organizations, refugee-led organizations, development partners, academia, and the private sector. The forum was envisioned as a platform to strengthen research-policy linkages, fostering ongoing dialogue and knowledge exchange to sustainably improve the welfare of refugees and host communities. It was anchored around a presentation of the findings from the first wave of the K-LSRH.[54] Discussions included the achievement and challenges in using socio-economic data and policy actions to enhance livelihoods, self-reliance and resilience of refugees and host communities.

Emerging evidence and policy implications

K-LSRH data was analyzed through the lens of self-reliance, reflecting the growing focus on strengthening self-reliance amidst the ongoing displacement crisis. This concept encompasses the social and economic capacity of individuals, households, or communities to meet essential needs with dignity sustainably. Figure 43 illustrates the conceptual framework for self-reliance, emphasizing fundamental human needs at its core.

54 K-LSRH is a longitudinal panel survey tracking socioeconomic indicators of welfare for both refugees and hosts in areas with significant presence of refugees and asylum-seekers in Kenya. More than 9,000 households were surveyed in the first wave, which was completed by June 2023. The same households are expected to be tracked and interviewed across years to establish the panel, allowing understanding of their needs and conditions over time. The data will contribute to overall evidence needs for programs and policymaking.

BOX 5: Piloting a scale to examine how refugees and host community members deal with challenges and thrive in the face of adversity

KAP-FD has used the learnings acquired through its panel survey, a systematic literature review, and consultations with experts, to identify the need for a psychometric scale that can help understand positive psychosocial factors of the lives of refugees and their hosts. KAP-FD is developing a new psychometric scale to assess what helps refugees and host community members deal with challenges and thrive in the face of adversity – the Dealing with challenges and Thriving Scale (DTS). The capacity to deal with challenges is a prerequisite for people to seek and take advantage of socioeconomic opportunities, to set up and successfully run livelihood activities and achieve self-reliance. KAP-FD's initiative helps fill data and knowledge gaps through the creation of a new scale to measure positive psychosocial constructs and generate evidence to inform development programs based on the skills and capabilities of communities in displacement contexts in the Global South.

The DTS uses an innovative qualitative-quantitative mixed methods approach allowing lived experiences to inform its design. The DTS is being developed in three iterative steps that integrate the voices of refugees and host communities. The first is qualitative analysis. The team conducted in-depth individual interviews with refugees and their hosts to better understand the resources that give them psychological energy to keep on going in the face of adversity. These in-depth interviews revealed four main themes: spirituality, giving and receiving social support, social connectedness, and future aspirations. The team developed a preliminary 20-item scale divided into these four themes. The scale was qualitatively tested with refugees and hosts who provided their suggestions for improvements. The second step is quantitative pre-testing. The scale will be tested in Nairobi with a small sample of refugees and hosts and will be adjusted based on enumerators' suggestions for improvement. The third step is a quantitative pilot. The pre-tested scale will be piloted with a sample of 1,000 refugees and hosts in Juba Arabic, Somali, Kiswahili and English. The data will be assessed for its psychometric properties including internal consistency reliability, discriminant validity and criterion-related validity. This will be one of the first psychometric scales created based on the lived experiences of refugees and hosts and validated in various languages spoken across East Africa.

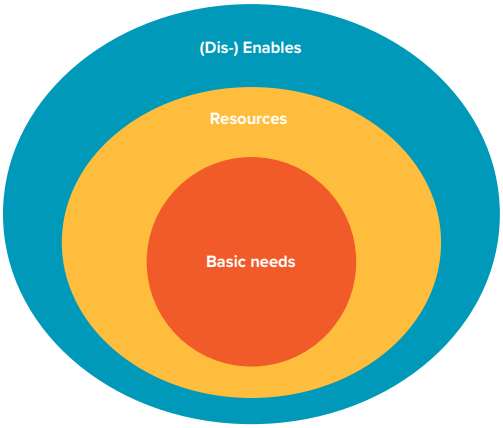
While humanitarian efforts typically focus on meeting these basic needs, achieving self-reliance entails progressing beyond basic needs by assessing a household's resources to meet them. Furthermore, it involves identifying factors that enable or constrain households in sustaining these needs over time (outer ring).[55]

Key indicators were analyzed by location and other key disaggregation levels, such as gender, for selected issues in each of the three dimensions (basic needs, resources, (dis-)enablers). Secondly, it explores correlates to shed light on factors that may shape observed outcomes with a view to providing policy-relevant insights. The analysis, therefore, aims to contribute to evidence-based discussions on how to promote refugees' and hosts' self-reliance in ways that strengthen their ability to meet essential needs with sustainability and dignity.[56]

Overall, the data shows that despite policy advancements, refugees still face significant challenges, such as restricted movement and limited employment opportunities. Restrictions on movement, limited employment opportunities, and difficulties obtaining work permits contribute to their reliance on humanitarian aid and persistent poverty. While Kenya has taken strides towards a policy framework for refugee self-reliance, refugees still struggle to meet basic needs. Employment opportunities are limited, especially for women, and there is a heavy dependence on aid in camps, while refugees in urban areas rely more on remittances and wages. Vulnerability to socio-economic and weather-related shocks further threatens resilience and welfare improvements, and psychosocial challenges add to the complexity.

55 Leeson et al., 2022
56 Leeson et al., 2022.

FIGURE 43: Conceptual framework for self-reliance



Source: Adapted from the Self-Reliance Initiative.

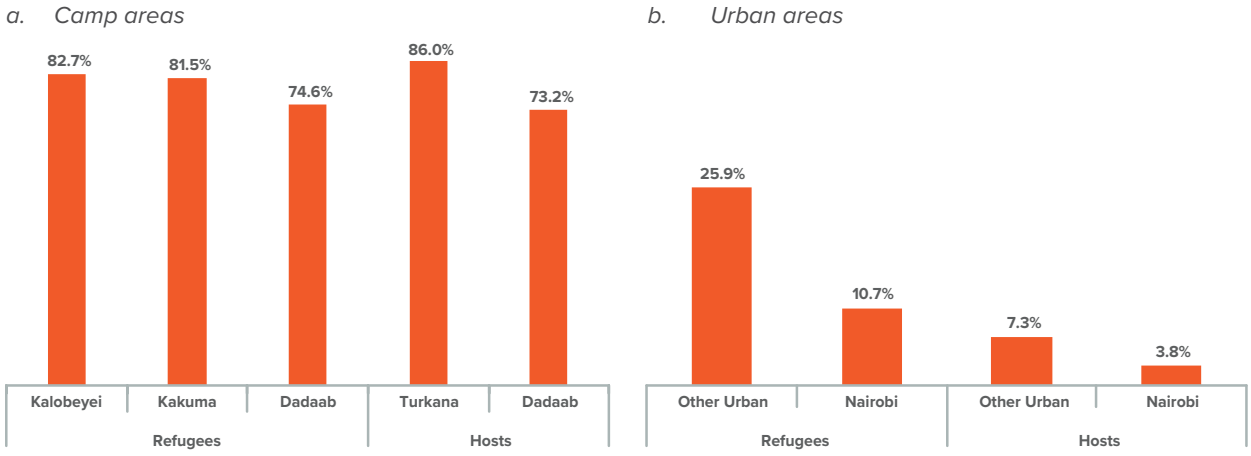
Basic needs

Both refugees and hosts face challenges in meeting their basic needs. Refugee camps and settlements, where most refugees live, are in arid and semi-arid regions that have for long lagged in development indicators. This is reflected in the stark poverty gap between camp and urban areas with multidimensional poverty rates up to 80 percentage points higher in camp areas compared to urban areas (Figure 44). Host communities in Turkana County are particularly trailing others having the highest multidimensional poverty rate (86 percent). Yet large gaps remain in social assistance coverage among hosts – only about 15 percent of host households in Turkana County receive any aid while all refugee households in camps receive aid. Despite high educational aspirations, few children transition from primary to secondary school – in Turkana County only 22 percent and 18 percent of refugees and host children of secondary age are enrolled in secondary school. Secondary enrollment in Garissa County is even lower at 8 percent for refugees and 12 percent for hosts respectively.

Socioeconomic resources to meet basic needs

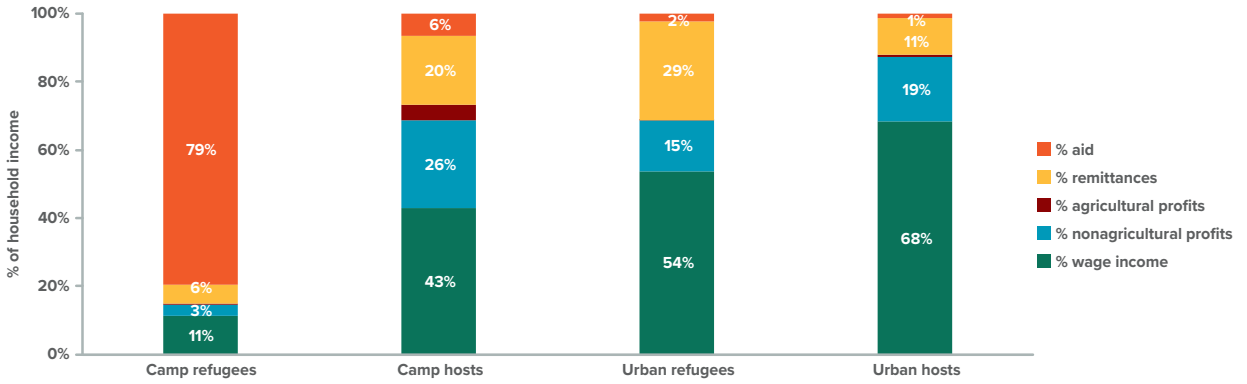
Refugees face significant challenges in accessing sustainable livelihoods, with camp-based refugees experiencing the greatest difficulties. Most camp refugees remain outside the labor force, especially women, while those who are employed often work as incentive workers in the service sector. In contrast, urban refugees are almost four times more likely to engage in economic activities, primarily in the informal sector, such as the wholesale and retail trade, but they still lag Kenyan nationals in employment outcomes. Consequently, aid transfers constitute 79 percent of camp refugees' total income. In comparison, wage earnings and profits from self-employed activities constitute only 11 percent and 3 percent, respectively, of total income, indicating that any withdrawal of assistance without expansion of income-generating opportunities will leave refugees even more deprived. The substantial dependence on aid places refugees in a vulnerable position, especially during periods of fluctuating

FIGURE 44: Multidimensional poverty rates



Source: Authors' calculations based on K-LSRH 2023.
Notes: Multidimensional poverty comprises indicators on education, employment, type of fuel for cooking and lighting, housing conditions, WASH (water and toilet) and nutrition.

FIGURE 45: Sources of household income (%)



Source: Based on the first wave of K-LSRH.

aid delivery. In urban areas, refugees exhibit better income diversification, with 54 percent of income issuing from wage work and 15 percent from self-employment, mirroring hosts. Access to aid is notably smaller because there is almost no aid going to urban refugees while remittances comprise a substantial income share instead (29 percent). High levels of education are positively associated with employment outcomes. Refugees who have obtained a work permit or movement pass, although only available to a small group, are significantly more likely to be engaged in the labor force than those without work documentation and informal networks also matter for finding job opportunities.

Education and skills training is the most mentioned type of support needed by refugees – both for employment and self-employment. This can be explained by the fact that most of the current working-age population were children at the time of displacement, leading to disrupted education and a lack of practical job experience. Nevertheless, the findings suggest that without the creation of job opportunities, education and skills training will have limited impact because of a constrained labor market. Labor underutilization is evident, with most employed refugees expressing a desire to work more hours. Women face additional barriers, including childcare and household responsibilities, which further limit their participation in the labor market.

Host communities, particularly in Turkana and Garissa, also face limited employment opportunities, exacerbating economic vulnerabilities. Many inactive individuals in these communities are discouraged from seeking work, citing a lack of wage jobs as the main obstacle. Like refugees, hosts rely on limited aid (Figure 45) and face structural barriers that hinder economic integration.

(Dis-)enablers for sustaining self-reliance and resilience

Dis-enablers are prominent, particularly in camp areas where shocks undermine households' ability to cope and adapt, highlighting the need to build resilience. Refugees in camps report higher exposure to socioeconomic and environmental shocks, including droughts, floods, and food price inflation. Their low resilience is reflected in limited coping mechanisms, with many resorting to reducing food consumption or doing nothing in response to shocks, signaling the urgent need for interventions that bolster adaptive capacity. Additionally, incorporating psychosocial programming could boost resilience among refugees. Refugees are more likely to report depression symptoms even after controlling for demographic and household characteristics.

Social support systems and interactions with peers can play a role in enhancing resilience. Trust may enhance integration efforts and provide a mutually enabling environment for both refugees and hosts to achieve self-reliance and resilience. Yet, the findings reveal stark disparities in trust levels across locations. In Turkana County, trust between refugees and hosts is significantly lower compared

to Garissa County. In urban areas over 80 percent of hosts view refugees as trustworthy. This variance underscores the need for targeted initiatives to enhance social cohesion, such as building intergroup social networks and promoting inclusive community programs. Besides location, social networks and perceived social support are positively associated with higher perceptions of trust towards individuals from groups different from one's own (out-groups).

Emerging policy implications

The findings suggest a phased approach to enhancing the integration of refugees and improving the welfare and resilience of both refugees and host communities. In the short run, easing restrictions on the right to work and movement is essential. Streamlining procedures for work permits, movement passes, and banking access can help refugees transition toward self-reliance, reducing hosting costs over time. Upskilling, job search support, and self-employment opportunities, especially for women and youth, are also critical in empowering refugees to integrate into the labor market. In the medium term, addressing spatial inequalities through place-based development in refugee-hosting areas can enhance welfare for both refugees and host communities and strengthen household resilience to shocks. Incorporating psychosocial support is also essential to building resilience in the long run. Continued implementation of a progressive policy framework is key to sustained self-reliance and resilience in the long run. In addition, timely and comparable quality data on refugees and host communities is key to successfully monitoring and assessing progress.

Lessons learned

It is key to ensure a complete, reliable, and up-to-date sampling frame for refugee populations. Sampling frames with up-to-date details on refugee populations are rare, as refugees tend to be hard to reach and their vulnerability makes them reluctant to share details. Databases with up-to-date information on refugees, such as the UNHCR registry of refugees, could be used as sampling frames in national household surveys. A long-term solution could involve integrating refugees into the sampling frame of the National Statistical Office (NSO) through a census that records the migration status or a targeted one in core refugee hosting areas (Kakuma, Kalobeyei, Dadaab camps and Nairobi). Some progress on the latter is already underway as the NSO is currently developing a listing in major refugee-hosting counties (Turkana and Garissa) for inclusion of refugees into the Kenya Integrated Household Budget Survey (KIHBS). However, a natural next step is to create overlapping clusters in urban neighborhoods with high density out-of-camp refugee residences so that any future data collection inclusive of refugee populations includes all refugees and asylum seekers in Kenya.

It is important to collaborate with organizations that have a level of trust with the refugee population, such as UNHCR, non-government organizations (NGOs) or community-based organizations (CBOs). Refugees are extremely vulnerable. They often rely on organizations within their community, such as UNHCR, NGOs or CBOs, to legitimize an activity. These organizations can inform refugee communities of upcoming surveys, through SMS and radio messaging. Additionally, they can involve local community leaders to announce the survey, address concerns and boost the study's participation rates. It is strongly advisable to contact the local UNHCR office directly to collaborate, or to learn about other organizations that can link them to the refugee community. It is also key to inform the UNHCR protection team who operate toll free helplines for refugees that they will use to inquire about the legitimacy of the survey.

Questionnaires can, and arguably should, be the same as for nationals, but small adjustments for the refugee sample can add a lot of value. Without comparative data for refugees and host communities, interventions risk being designed for only one group. To ensure the data is comparable, the same questionnaire should be administered to refugees and nationals. Minor alterations may still be necessary to account for refugees' situations. For example, the migration status of respondents and their families is key, as are questions necessary to construct survey weights so that data can be analyzed by migration status. Topics specific to refugees can enrich the analysis and can easily be integrated when these communities are interviewed. Certain topics are sensitive for refugees, such as anything related to the resettlement process or

refugee status. In addition, current employment status can also be sensitive as many refugees do not have the official right to work in Kenya. These topics need to be considered when designing questionnaires and enumerators should be trained accordingly. Enumerators must also be aware of possible differences in definitions. For example, UNHCR registers refugees as 'families', a grouping that has an important role in receiving food aid. This may differ from the definition of households typically used in surveys.[57]

Excessive interview length may cause high non-response rates and affect data quality. Especially in urban areas, the opportunity cost of time can be remarkably high for wealthy households. This can lead to higher non-response rates in the richest segment of the sample and thus to inaccurate capture at the upper end of the consumption distribution, distorting the representativeness of the sample for the wider population. Additionally, long interviews can cause fatigue which increases the likelihood of nonresponse. Tired respondents tend to become less accurate in the answers they provide, and fatigued enumerators are more error prone in entering the data. Enumerators can also probe the respondents less when tired. In each of these cases, data quality suffers. Consequently, questionnaire design should balance the research scope and logistic constraints - and carefully consider the value of respondents' time. In training, the need to involve the respondent over a few hours should be impressed upon enumerators.

Stakeholder engagement is crucial for data utilization and research-policy forums can help strengthen linkages between data and action. Convening stakeholders to discuss the results and implications of socioeconomic analysis fosters collaboration and enhances the practical application of data. By involving diverse actors, government agencies, NGOs, refugee-led organizations, development partners, academia, and the private sector, the process ensures a shared understanding and promotes inclusive approaches to addressing challenges. Such forums also provide opportunities to align research findings with national development priorities.

Building local capacity and fostering inclusion in national statistical systems are key lessons from the KAP-FD initiative. Tailored workshops and training sessions for the Kenya National Bureau of Statistics (KNBS) and local researchers have enhanced their ability to include refugees for the first time in the standard household budget survey. Additionally, in partnership with the African Economic Research Consortium (AERC), KAP-FD has supported local researchers to utilize data produced under its program, enhancing capacity for displacement-related research while ensuring wide usage of World Bank-supported survey data. These efforts are complemented by the development of a public "one-stop shop" dashboard, which provides governments and the global community with accessible and interactive forced displacement data. By combining capacity building, data accessibility, and inclusion, the initiative highlights the importance of integrating refugees into national frameworks and empowering local expertise to inform context-specific, evidence-based decisions.

Next steps: addressing remaining data and evidence gaps

Despite significant advancements in data collection and analysis, key gaps remain in understanding the socioeconomic realities of refugees and host communities, particularly in urban areas. Urban refugees are notably difficult to sample due to their dispersal across informal settlements and limited inclusion in existing databases. Even when sampled, locating and interviewing these individuals poses logistical challenges, resulting in underrepresentation in studies. Addressing this gap requires innovative sampling methodologies that leverage new technologies, such as geospatial mapping and mobile data, alongside partnerships with local organizations that can facilitate access to hard-to-reach populations. Closing this gap is essential for providing a comprehensive understanding of urban refugees' needs, their interaction with local economies, and their integration into urban systems.

57 UNHCR provides standard guidelines for resolving this issue with three options, available on UNHCR's Assessment and Monitoring Resource Centre portal, and in-country registration focal points can provide context-specific solutions.

Another critical gap lies in accurately measuring the welfare of refugees, particularly given the complexities of accounting for aid as part of household consumption. Traditional welfare measures often fail to capture the full spectrum of resources accessible to refugees, including in-kind aid such as food rations or housing support, leading to potential underestimation or overestimation of their economic wellbeing. Furthermore, there is limited evidence about the best approaches to elicit willingness to pay for services, a crucial metric for designing sustainable interventions and programs. Refugees' willingness to pay may be influenced by factors such as unstable income, cultural norms, and perceptions of service quality. Developing tailored methodologies to capture these nuances, such as contingent valuation or experimental approaches, can significantly enhance the understanding of refugee and host community priorities and inform the design of cost-effective, user-centered service delivery models.

Finally, there is a pressing need for more rigorous evidence to inform the design and implementation of programs aimed at improving economic opportunities for refugees and host communities. Most existing evidence is descriptive and rarely captures the causal effects of development interventions, limiting the ability to assess what works effectively. Rigorous impact evaluations, including randomized controlled trials and quasi-experimental designs, are essential to identify the effectiveness of programs and to understand how interventions impact key outcomes, such as employment, education, and social cohesion.

Refugee statistics must be part of official statistics to influence policy interventions and ensure the sustainable inclusion of refugees in statistical systems. Inclusion of refugees in surveys led by KNBS allows for generation of comparable socioeconomic statistics for refugees with their immediate host communities, as well as the wider national population. Previous joint support and advocacy have resulted in refugees being included in the upcoming round of the Kenya Integrated Household Budget Survey (KIHBS), a nation-wide survey conducted by KNBS, and with support of the World Bank – UNHCR Joint Data Center (JDC). Surveys done by national statistical offices (NSOs) ensure not only sustainability in continuous generation of forced displacement statistics but also ensure that the statistics are well placed to feed into respective governments' planning processes.

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Towards More
Sustainable Solutions
for the Forcibly
Displaced in Niger

CHAPTER 2.8

Towards More Sustainable Solutions for the Forcibly Displaced in Niger

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Abstract

The Government of Niger operates a progressive approach to hosting refugees and offers essential protections, guarantees fundamental rights, and supports the inclusion of refugees into national systems (UNHCR, 2023a). Yet despite this, refugees are more likely to live in poverty than their hosts, with the incidence of refugee poverty 67 percent in 2019, compared to 46 percent among the host population. This paper explores why refugees in Niger experience higher rates of poverty, by comparing them to their hosts but also to other internally displaced persons. The findings show refugees' lower income levels are more likely the result of a poor economic environment and/or 'latecomer effects'58 as opposed to a lack of endowments. Also, discrimination against foreigners is ruled out as refugees and IDPs face comparable rates of return. Yet, refugees are found to have less access to land. These findings have implications for assistance provided to refugees. Current levels of assistance in Niger are insufficient for refugees and internally displaced persons (IDPs) to attain a decent standard of living and an additional $28.5 million in external assistance (equivalent to a 60 percent increase in aid) would be required to bring refugee and IDP incomes to a level comparable with hosts.59 The additional external assistance needed to bring refugees and IDPs to the international poverty line ($2.15 per day) is much higher, $107.2 million, equivalent to a 220 percent increase in external assistance. Given the significant potential for refugees and IDPs to earn incomes, it would be more effective to invest in improving the economic opportunities available to refugees and IDPs by supporting market-based activities that are likely to boost their financial autonomy and incomes.

Editors' Note: *Niger constitutes a fascinating case of developing a sophisticated, well-integrated approach for data collection on displaced populations. The Government of Niger has been very progressive in securing fundamental rights for refugees, and that stance has been mirrored in their inclusion of displaced households in national statistics. By combining the UNHCR registry with a previous national household survey, the government of Niger ran a two-stage sample stratified by the three main regions in the country, and dedicated 1/5 of the sample for host villages to facilitate comparisons of welfare between refugees, proximate hosts, and regional and national averages. This sampling strategy enables the rich analysis found in this chapter.*

58 'Latecomer effects' refer to the disadvantages faced by refugees as a result of being new arrivals to host areas, which may result in them accessing lower quality, marginal lands and having inferior economic relations with the host population.

59 Estimate assumes not only assume that the poverty gap remains the same as it was in 2019, but that refugees from Burkina Faso have the same poverty gap as the average Malian and Nigerian refugee in Niger in 2019.

Introduction

The Government of Niger operates an exemplary set of policies towards refugees. It offers refuge to those in need of international protection through an 'out-of-camp' policy. This not only aims to avoid settling refugees in permanent camps but intends to promote local integration and self-sufficiency of all forcibly displaced persons[60] (FDPs). Most refugees in Niger live in informal sites or within host communities in rural and peri-urban areas. A small, urban refugee population resides in the cities of Niamey and Agadez, while the country's only refugee camp, Sayam Forage, is home to over 30,000 refugees. These refugees are mainly from Nigeria and are based in the camp for security reasons following attacks by non-state armed groups. They are free to move as they please (UNHCR, 2023a).

Niger has not only provided a haven for those fleeing violence and persecution, but the country's refugee policies comprise a host of fundamental rights for refugees. Under the country's 1997 Refugee Law and implementing decree, refugees and asylum seekers are granted the right to work, freedom of movement, access to national public services, and access to land, housing and property rights on an equal footing with nationals. Not only does Niger's progressive refugee law grant refugees the right to work on par with foreign nationals, but with almost all refugees being citizens of the Economic Community of West African States (ECOWAS), refugees enjoy the same de jure rights as Nigeriens in the labor market, in line with several ECOWAS treaties. Refugees thus face little or no legal issues accessing employment in Niger, with Niger one of only four countries in Sub-Saharan Africa to offer refugees and asylum seekers full access to employment and national social security programs (UNHCR, 2023a; 2023b).

Despite Niger's exemplary refugee regime, refugees in Niger are more likely to live in poverty than the country's IDP and host populations. Among these populations, poverty incidence is 46 and 62 percent for hosts and IDPs, respectively; while among the refugee population, it is 67 percent. This paper aims to understand the reasons for the higher rates of poverty among refugees. Three explanations are investigated: (i) Are incomes lower because refugees have fled their place of origin and have fewer endowments than their hosts? (ii) Are refugee incomes lower because refugees are discriminated against, if not in a de jure sense (rights in law) then in a de facto manner (rights in practice)? (iii) Is it possible that returns to endowments are lower simply because refugees were recent arrivals, forced to settle in the least attractive locations or use land of lower quality while lacking the experience and knowledge of local circumstances to fully exploit economic opportunities?

There are several benefits to better understanding the differences in earned income between refugees, IDPs and hosts. Primarily, improvements in the financial autonomy of FDPs reduces poverty, and enhances the agency, dignity, and overall well-being of refugees and IDPs; these improvements also reduce the need for humanitarian aid, thereby allowing for the reallocation of scarce aid resources towards development (World Bank and UNHCR, forthcoming).

To explore these possibilities, this paper makes use of the fact that Niger not only hosts refugees but IDPs as well. Through a host of descriptive and inferential analytical techniques, differences in income between refugees, IDPs and hosts are attributed to explained factors (e.g. differences in their endowments) and unexplained factors (e.g. differential returns on their endowments). To explore the extent to which discrimination against refugees explains these differences in income, decompositions are carried out on refugee as well as for IDPs incomes, on the assumption that because IDPs are citizens of Niger they avoid the discrimination faced by refugees on account of being foreign nationals.[61]

This paper thus investigates whether the rights assigned to refugees by Nigerien law are complied with in practice. The results are both sobering and cause for optimism. The latter is attributable to the fact that no major differences are found between refugees and IDPs incomes, appearing to refute the possibility of discrimination against foreigners.

60 Forcibly displaced persons encompasses refugees, asylum-seekers, other people in need of international protection and internally displaced people (IDPs).

61 This still does not rule out that IDPs may face discriminations as well. If they come from other regions or are from other ethnic groups, they could be considered "outsiders", like refugees. Yet unlike refugees, IDPs do have all advantages conferred by Nigerien nationality.

However, access to land is almost three times lower among the refugee population than the IDP population, potentially indicating discrimination. While the results also show that both IDPs and refugees have lower returns on their endowments than hosts, implying the FDPs face significant 'latecomer effects'.

To explore these factors in detail, the remainder of this paper is organized as follows. Section 2 covers the data sources used in this paper. Section 3 explores the current situation of refugees and IDPs in Niger before the socioeconomic and demographic characteristics of refugee, IDP and host populations are discussed in Section 4. Sections 5 and 6 use descriptive and inferential analyses to explore the determinants of refugee earnings and the reasons for income differentials between refugees, IDPs and hosts. Section 7 examines the resources required for refugees and IDPs to meet their subsistence needs through external assistance, before a discussion of the policy implications of the paper's findings follows in section 8, after which section 9 concludes.

Data sources

The primary data source used in this paper is Niger's Harmonized Survey on Households Living Standards 2018-2019 (EHCVM 2018/19). The EHCVM (2018/19) is a nationally representative survey of households. The survey was conducted in two waves between October 2018 and December 2018, and April 2019 and July 2019, with over 6,000 households surveyed. A separate sampling stratum was used to collect information on refugee and IDP households in Diffa, Tahoua and Tillabéri, the main hosting regions in Niger. The sampling of refugee and internally displaced households was a two-stage, stratified process, with the primary sampling unit being the Enumeration Area (EA), drawn from an exhaustive list of refugee sites and IDP sites obtained from UNHCR. A total of 165 EAs were randomly selected across all refugee/IDP sites, with approximately 20 percent comprising host community clusters (villages). In the second stage of sampling, 12 households were selected from all sampled EA following an enumeration operation that created a comprehensive list of households within each EA. This sample provides a statistically representative picture of the socioeconomic status of both the host and forcibly displaced populations in Niger (INS, 2021). Table 27 presents the distribution of the sample after data collection, with a response rate of 97.5 percent. This survey data is complemented by population statistics from the UNHCR Refugee Population Statistics Database (2024), and socioeconomic data from the WFP and UNHCR Joint Assessment Mission survey in Niger (2023). The latter surveyed households in major areas of forced displacement in November 2022, providing information on livelihoods, food security, public service access, and other welfare indicators for refugee, IDP and host populations in Niger.

Table 27: Distribution of the sample by type of households

Type of households	Sample size (households)
Displaced from Niger	465
Refugees: from Mali	528
Refugees: from Nigeria	563
Host	375
Total	**1931**

Source: Authors' calculation using the forced displaced sub-sample of EHCVM 2018/19 data.

Refugees and IDPs in Niger

Niger is located at the heart of the Central Sahel region, an area beset by conflict and violence. Since 2012, vast numbers of refugees and asylum seekers have spilled into Niger's southern and eastern regions, driven by coup d'états and insurgencies in Mali and Burkina Faso as well as violence and instability in Northern Nigeria, where "bandit" militia groups and conflicts with Boko Haram have forced large numbers of Nigerians into Niger's southern and Lake Chad Basin regions (UNHCR, 2024a; GCT, 2024).

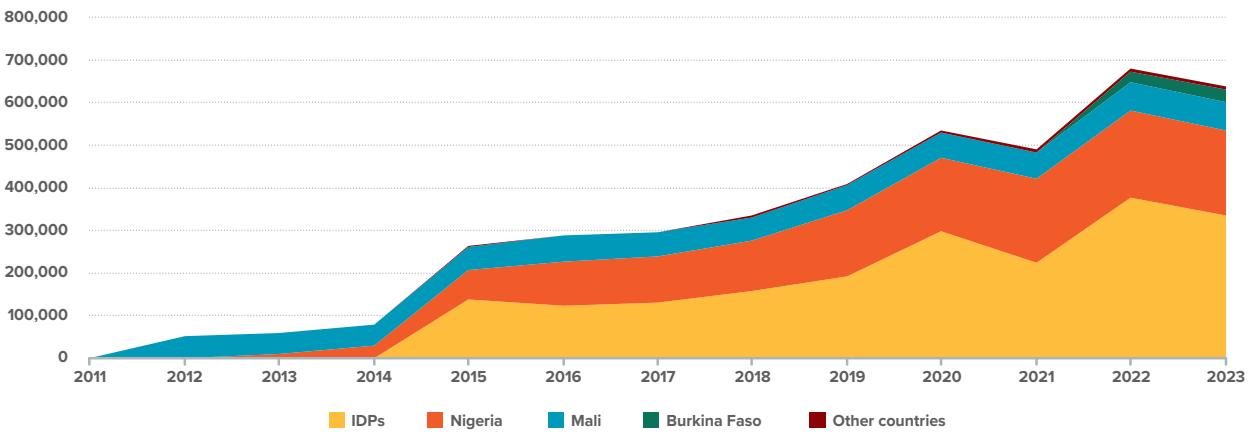
As a result, the number of refugees and asylum seekers in Niger has risen significantly in recent years, increasing 40 percent in four years from December 2019 to January 2024 (UNHCR, 2024a, 2024b). Niger is now the largest country of asylum in West Africa, hosting an estimated 306,194 refugees and asylum seekers as of January 2024 (UNHCR, 2024). Refugees from Nigeria make up the greatest proportion of the country's refugee population (65 percent), followed by those from Mali (22 percent)

and Burkina Faso (10 percent), with a further 3 percent of refugees arriving from Chad, Sudan and other, neighboring countries (UNHCR, 2024a).

In addition to being the largest host country in West Africa, Niger has a significant internally displaced population, which since 2015 has dwarfed the country's refugee and asylum-seeking population (see Figure 46). As of January 2024, there were more than 335,277 internally displaced persons (IDPs) in Niger as well as an additional 45,699 'other people of concern', with the latter comprised largely of Nigerien returnees escaping conflicts and insecurities in their adopted host countries (UNHCR, 2024). The drivers of internal displacement in Niger vary significantly: from droughts and flash flooding to violent insurgencies and conflict, and with the political, security, and environmental situation in Niger uncertain, further internal displacement cannot be ruled out in the near term (IDCM, n.d.; GCT, 2024; UNHCR, n.d.).

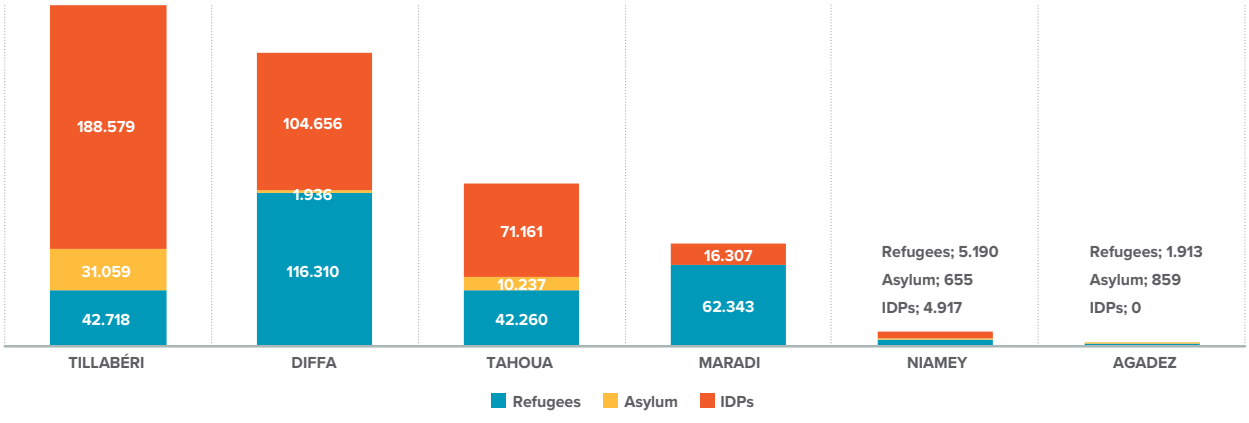
As of January 2024, there were over 687,000 forcibly displaced persons in Niger, almost 2.5 percent of Niger's 27.2 million population (UNHCR, 2024). While this represents a relatively small fraction of the national population, displaced persons are predominantly concentrated in a few underdeveloped regions, creating significant pressure on local resources (UNHCR, 2023b). Most notably, the concentration of refugees, asylum seekers and IDPs in the Diffa region is especially

FIGURE 46: Forcibly displaced persons in Niger (2000-2023)



Source: UNHCR (2024b), UNHCR (2023).

FIGURE 47: Refugees, asylum seekers. And internally displaced persons in Niger by region, january 2024



Source: UNHCR (2024b), UNHCR (2023).

high, with FDPs equivalent to approximately 27 percent of the host population. Furthermore, the majority of FDPs within the Diffa region are located within the sub-regional département of Diffa, where they represent over 40 percent of the total population. The proportion of the FDP-to-host population is far less in the country's other, major host regions of Tillabéri (7 percent), Tahoua (2 percent) and Maradi (2 percent). However, even in these regions, FDPs are concentrated in a handful of sub-regional départments. For instance, in Abala and Ayerou in the Tillabéri region, FDPs represent around 15 percent and 35 percent of the host population, respectively; while in the département of Tillia in Tahoua region, the population of FDPs makes up circa 55 percent of the département's population, placing significant pressures on local infrastructure and resources (UNHCR, 2024a; INS, 2023).

Descriptive statistics

This section presents key social, economic and demographic data on Niger's two main refugee populations (Malian and Nigerian refugees) as well as the country's IDP and host populations. As Table 28 shows, the demographic composition of these groups is broadly comparable with similarities in the age of household head, household size, and household dependency ratio. Human capital is also remarkably low across all four population groups, albeit slightly higher among the host population, with refugees and IDPs showing similar education outcomes.

Access to agricultural land and assets is higher among the host population, who are far more likely to own land, farm larger plot sizes, and have poultry and ruminant livestock than FDPs. Most notably, refugees have vastly inferior agricultural access and assets compared to hosts, with just 2 percent of refugees working in agriculture owning agricultural land compared to 77 percent of the host population, with refugee plot sizes also 30 percent smaller than hosts on average, and refugee ruminant livestock ownership almost half that of the host population (EHCVM, 20218/19).

To understand the differences in poverty levels between refugees, IDPs and hosts, this paper uses the international poverty line[62] of USD 2.15 per day to estimate the proportion of each population that lives below the poverty line (poverty incidence) and their distance below the poverty line (poverty depth and severity). With incomes notoriously difficult to estimate (Deaton 1997; Carletto 2022), particularly

TABLE 28: Household characteristics: Refugees, IDPs and hosts

Household Characteristics	IDPs	Refugee (Mali)	Refugee (Nigeria)	Hosts
Age of head	42	44	42	45
Head is female	30%	40%	27%	23%
Household size	4.9	5.1	4.4	5.0
Share of dependents	55%	57%	51%	53%
Average years of schooling	0.5	0.4	0.2	1.1
Share of head with no education	92%	94%	96%	82%
Share of head with primary education	5%	4%	4%	12%
Share of head with secondary education	3%	2%	1%	5%
Average land size, ha (if work in agriculture)	1.2	0.9	1.1	1.4
Land ownership (if work in agriculture)	17%	0%	2%	77%
Land ownership (all households)	27%	1%	14%	38%
Poultry (average per household)	6.6	7.1	5.5	7.2
Ruminants (average per household)	5.3	3.9	4.2	7.4

Source: EHCVM (2018/19).

62

TABLE 29: Poverty estimates using total consumption (including aid) and the international poverty line (USD 2.15/day)

Population	Poverty Headcount	Poverty Depth	Poverty Severity
Refugees (Nigeria)	52%	15%	6%
Refugees (Mali)	92%	47%	28%
Refugees (All)	67%	27%	14%
IDPs	62%	22%	10%
Hosts	46%	16%	7%

Source: EHCVM (2018/19).

TABLE 30: Primary employment of household head (share of household heads working in sector/type of employment)

Population	Agriculture	Industry	Services	Self-employed
Refugees (Nigeria)	18%	51%	31%	77%
Refugees (Mali)	20%	64%	16%	53%
IDPs	41%	36%	23%	85%
Hosts	44%	36%	20%	82%

Source: EHCVM (2018/19).

when most refugee income is earned informally or through self-employment, this paper approximates earned income by deducting (humanitarian) assistance received from total consumption. The implicit assumption is that refugee (net) savings are negligible and that by removing external assistance, the earned income of households can be inferred.

Table 29 below shows the poverty levels for refugees, IDPs and hosts using total consumption levels. As Table 29 shows, poverty incidence, depth and severity are far higher among refugees compared to the host population. These higher levels of poverty are noticeably pronounced for Malian refugees, whose poverty incidence, depth and severity are two, three and four times larger than the host community, as shown in Table 29.

Primary income sources differ significantly between the various population groups. The main source of employment for both the host and IDP population is agriculture, followed by industry and services[63], as shown in Table 30. For refugees, the picture is noticeably different, with the main source of employment for both Malian and Nigerian refugees the industrial sector, with 55 percent of working[64], refugee household heads employed in the industrial sector, compared to 35 percent of IDPs and 36 percent of hosts. Refugees are also far less likely to be self-employed than hosts and IDPs, with this difference particularly pronounced for Malian refugees.

Determinants of refugee earnings

As the analysis in the previous section shows, despite refugees and IDPs in Niger having the same personal and economic freedoms as the host population, they typically fare worse than hosts across a range of indicators of well-being. Most notably, refugees in Niger have inferior access to agricultural land and higher levels of poverty than hosts. To understand the conditions associated with higher incomes among refugees and IDPs, this paper uses a simple Ordinary Least Squared (OLS) regression to explore the relationship between household characteristics and refugee own-earned income.

63 Industry refers to mining, quarrying, construction, water, electricity and other industry. Services refers to transport, hospitality, arts, and other services

64 Using the ILO's definition of unemployment, this paper finds that the unemployment rate for refugees is around 0.7 percent%, IDPs 1.2 percent%, and hosts circa 1.7 percent% (EHCVM, 2018/19). An unemployed person as defined by the ILO is a person aged 15 or over who simultaneously meets three conditions: being unemployed for a given week; being available to take a job within two weeks; having actively sought a job in the last four weeks or having found one starting in less than three months (ILO, 2018).

TABLE 31: Results from OLS regression explaining the difference in log pre-assistance per capita consumption by refugee, IDP, and host household characteristics

	Characteristics	Hosts / IDPs / Refugees	Hosts	IDPs / Refugees	IDPs	Refugees
Demographic	Age of head	0.002	0.006	0.001	0.003	-0.002
	Head is female	-0.057	0.056	-0.079	-0.161	-0.091
	Head is married	0.009	0.191	-0.028	-0.178	0.025
	Household size	-0.095***	-0.103***	-0.093***	-0.068***	-0.115***
	Share of dependents (young & elderly)	-0.771***	-0.737***	-0.755***	-0.648***	-0.880***
Education	Semi-qualified/Qualified (educ ≥ 6)	0.220***	0.373***	0.089	0.237**	0.022
Employment Status	Head employee in agriculture	-0.073	0.213	-0.073	0.071	0.015
	Head employee in industry	-0.032	0.314*	-0.042	0.072	0.043
	Head employee in services	0.193***	0.254	0.195***	0.266**	0.286***
	Head is self-employed	0.204***	-0.350**	0.263***	0.222*	0.181**
Agricultural household	Household engaged in agriculture	0.144	0.112	0.068	-0.202	0.031
	Land is sandy soil	0.142*	0.136	0.166*	0.078	0.386**
	Land is silty soil	0.216**	0.187	0.302***	0.245*	0.531***
	Land size (ha)	0.004	0.034	-0.001	-0.003	-0.008
	Time to plot (min)	0	-0.001	0	0	0.001
	Number family labor	0.001**	0	0.001*	0.001**	0.001
	Any hired labor	0.189**	0.042	0.270**	0.283**	0.332
	Average intercropping on lands	-0.118	-0.166	-0.148	0.091	-0.369**
	Average use of organic fertilizers	0.167	-0.471	0.340*	-0.244	0.364*
	Average use of inorganic fertilizers	-0.119	0.142	-0.435**	0.048	-1.216***
	Average use of pesticide on lands	0.254	0.263	0.348	0.145	0.599**
Non-farm enterprise	Non-farm in sector: agriculture	0.206*	-0.131	0.308***	0.179	0.259
	Non-farm in sector: industry	0.146	0.034	0.181*	0.092	0.253**
	Non-farm in sector: services	0.259***	0.27	0.295***	0.181	0.394***
	Non-farm owns vehicle	0.015	0.374	0.033	0.134	0.104
	(max) own equipment	0.17	0.187	0.159	0.143	0.171
	Total value of owned livestock	0.000***	0	0.000***	0	0.000***
	Number of family labor in non-farm	0.029	0.198**	-0.034	-0.097	-0.01
	Number of non-family labor in non-farm	0.05	0.09	0.035	0.006	0.058
	Constant	0.871***	0.892***	0.919***	0.994***	0.994***
	Observations	1859	303	1556	465	1091
	Adjusted R-squared	0.331	0.391	0.318	0.314	0.357

Note: *** significant at 1 percent, ** at 5 percent, * at 10 percent.
Source: EHCVM (2019).

TABLE 32: Agriculture inputs and outputs for households engaged in self-employed agriculture

Population group	Land size (ha)	Number of crops	Time to plot (mins)	Days labour	Using organic fertilizer	Using pesticide	Agricultural productivity (FCFA/ha)
Refugees (Nigeria)	1.1	1.2	48	87	1.3%	24.6%	348,119
Refugees (Mali)	0.9	1.7	52	47	0.0%	0.0%	20,250
IDPs	1.2	1.2	48	82	0.5%	13.6%	94,584
Hosts	1.4	1.2	44	98	2.3%	19.0%	371,888

Source: EHCVM (2018/19).

For the dependent variable, the logarithm of daily, per capita, self-generated income is used. In this descriptive model, the income-generating capacity of households is a factor of both the accumulation of assets and a household's ability to exploit these assets to generate returns in the form of income. To account for these factors, this paper includes regressors on household human capital, physical capital, demographics, and labor market outcomes, with a positive correlation between the dependent variable and a regressor indicating that the regressor is positively associated with an increase in self-generated income. Table 31 below shows the results.

As the table above shows, across all population groups large household sizes and high dependency ratios[65] are associated with less earned income (per capita), with high dependency ratios having a greater negative association with income than household size. For both IDPs and hosts, a higher level of education (six years or above) translates to more income; yet for refugees, education level is neither associated with higher nor lower income levels.

Sector and type of employment also have a significant impact on the ability of refugees, IDPs and hosts to generate income. However, the relative importance of these sectors varies by population group. For refugees and IDPs, being self-employed is strongly associated with higher earned incomes, while for hosts it is associated with lower incomes. For hosts, the most lucrative means of employment is employment in industry, which is the least lucrative sector for refugees (along with employment in agriculture). For refugees and IDPs who are employed (i.e. not self-employed), employment in services is positively associated with earned income, while employment in agriculture and industry is neither positively nor negatively associated with earned income.

Table 36 in the chapter appendix shows a condensed version of the regression model presented in Table 31, with this model focusing specifically on the source of income, rather than the inputs associated with it. This model shows that for refugees, self-employment in agriculture is more likely than any other sector to lead to higher earned incomes, followed by self-employment in non-farm enterprises. This is in marked contrast to IDPs, for whom self-employment is strongly negatively associated with income.

The results of this analysis show that self-employment in agriculture is a potentially significant source of income for refugees, especially when organic fertilizers and pesticides – which are strongly associated with higher incomes (see Table 31) – are used. As Table 32 shows, agricultural inputs – namely the use of organic fertilizers and pesticides and the number of days worked on the land – are far greater among Nigerian refugees and hosts who have higher agricultural productivity and incomes compared to Malian refugees and IDPs. Improving access to agricultural inputs for Malian refugees and IDPs may thus be an important factor in improving agricultural output and earned incomes and lifting these groups out of poverty[66].

65 Dependents are those that are ages 0-14 years old and ages 65 and over.

66 When the dependent variable looks solely at the population below the poverty line, using the dependent variable of log ratio of pre-assistance consumption to international $2.15 line, the association between use of organic fertilizers and the log ratio of pre-assistance consumptions among the host population increases to 0.344**.

The impacts of other agricultural inputs on FDP incomes are not known as other asset ownership among the refugee and IDP population is very low, making meaningful analysis impossible.

Understanding the causes of lower incomes among refugees and IDPs

As the above analyses show, refugees and IDPs fare far worse than hosts across a range of welfare outcomes. Yet both refugees and IDPs have comparably high levels of poverty, with comparisons notably close among Nigerian refugees and IDPs (see Table 29). Once external assistance is removed and 'earned incomes' are compared, the similarities between these groups are even stronger, with poverty incidence rising to 72 percent for Nigerian refugees, 72 percent for IDPs, and 95 percent for Malian refugees; while the poverty gap rises to 22 percent for Nigerian refugees, 30 percent for IDPs, and 62 percent for Malian refugees. The poverty levels for the host population remain unchanged as they do not receive humanitarian assistance.

Without external assistance the levels of poverty experienced by Nigerian refugees and IDPs are identical, potentially indicating some level of comparability between both groups' earning potential. The data used for these calculations is the EHCVM (2018/19). In this dataset, Nigerian refugees and IDPs reside in the same geographical areas, while Malian refugees are hosted separately, meaning comparisons between IDPs and Malian incomes/poverty levels are likely to reflect differences in their environments in addition to their natural endowments and returns on them. The comparable poverty levels between Nigerian refugees and IDPs, however, who reside in the same areas and thus face the same environmental and economic conditions, are likely to demonstrate similar treatment between refugees and IDPs, and therefore a lack of discrimination towards refugees.

To explore this more formally, and understand the reasons for differential incomes between refugees, IDPs and hosts, this analysis uses Oaxaca-Blinder decompositions to explore how much of the differences in income between these groups are due to observable characteristics (i.e. differences in endowments), and how much is due to unexplained factors (e.g. discrimination or unobserved characteristics).

This analysis is done by constructing counterfactual distributions of income for refugees and IDPs, where the levels of explanatory variables and regression coefficients are assumed to be identical to the host population. By controlling for differences in observed characteristics – and by assuming that refugees and IDPs are comparable to hosts in their access to the labor market, agricultural land, productive assets and other critical resources – it is possible to estimate the income lost as a result of the lower economic endowments of refugees and IDPs, and the income lost as a result of unexplained factors. The latter, unexplained component includes both the unobserved characteristics in the model (omitted variables) and the differential returns IDPs and refugees receive from their labor and assets when compared to hosts. Given the predictors in this model include the key determinants of income identified by this paper, a significant proportion of the unexplained component from this analysis is likely due to differential returns rather than omitted variables. By understanding the magnitude of the explained and unexplained components, appropriate policies for closing the gaps in income between population groups can be explored. These analyses show that despite refugees losing numerous productive assets (physical, financial, human and social) when fleeing their homes, most differences in income between refugees and hosts is a result of unexplained factors and lower rates of return.

For IDPs, the distinction is smaller, with only 48 percent (0.134/0.279) of the difference in income between IDPs and hosts unexplained by the model. While less, this still reveals that almost half of the differences in income between hosts and IDPs are the result of lower rates of return on IDP endowments, rather than differences in the endowments of these groups.

Table 33 below shows outputs from five separate Oaxaca-Blinder decompositions. Column 3 of the table shows how the differences in income between refugees (Malian and Nigerian combined) and hosts are overwhelming due to unexplained factors. Specifically, only 28 percent (0.135/0.475)

of the differences in income between refugees and hosts are the result of differences in observed characteristics, which can be eliminated by restoring refugee endowments to levels comparable with hosts. This means that 72 percent (0.339/0.775) of the difference in income between refugees and hosts cannot be explained by the endowments of these groups. They are thus either due to differential returns on their endowments and/or factors omitted from the model, with these results highly statistically significant. When hosts are compared with Malian refugees and Nigerian refugees separately, the results are similar, with 76 percent (0.832/1.090) of the differences in incomes between Malian refugees and hosts, and 82 percent of the differences in incomes between Nigerian refugees and hosts, a result of unexplained characteristics. However, it is only the former that is statistically significant, with the lack of statistical significance between Nigerian refugees and hosts likely due to the already small differences in their incomes, as discussed earlier. These analyses thus show that despite refugees losing numerous productive assets (physical, financial, human and social) when fleeing their homes, most differences in income between refugees and hosts are a result of unexplained factors and lower rates of return.

For IDPs, the distinction is smaller, with only 48 percent (0.134/0.279) of the difference in income between IDPs and hosts unexplained by the model. While less, this still reveals that almost half of the differences in income between hosts and IDPs are the result of lower rates of return on IDP endowments, rather than differences in the endowments of these groups.

Most differences in income between refugees and hosts are due to lower rates of return on refugee endowments, rather than differences in endowments between these groups. These differential returns may be the consequence of several factors, including poor economic environment, discrimination, and/or a 'latecomer effect'. The 'latecomer effect' refers to the disadvantages faced by FDPs as new arrivals to host areas, which may result in FDPs accessing lower quality, marginal lands and having inferior economic relations with the host population. In many remote, rural locations where small, informal economies preside, the economy is often embedded in social and cultural relations, rather than operating as an isolated area. As economic activity plays a significant role in fostering social relations, and by extension in maintaining long-term economic and social activity, it may be prudent for hosts to favor established economic relationships over new and potentially temporary ones, resulting in discrimination against FDPs (Sahlin, 1972; Greif 1993; Betts, 2021). To understand the importance of these factors in determining refugee and IDP incomes, several analyses are conducted in this paper.

TABLE 33: Regression outputs from Oaxaca-Blinker regressions of hosts (group 1) versus other population groups (group 2). The dependent variable is the log of pre-assistance daily consumption expenditure in 2017 PPP

	Hosts vs. all FDPs	Hosts vs. IDPs	Hosts vs. all refugees	Hosts vs. MLI refugees	Hosts vs. NGA refugees
Prediction group 1	0.701***	0.701***	0.701***	0.701***	0.701***
	(0.051)	(0.045)	(0.054)	(0.060)	(0.048)
Prediction group 2	0.300***	0.422***	0.227***	-0.389***	0.584***
	(0.022)	(0.034)	(0.029)	(0.029)	(0.033)
Difference	0.401***	0.279***	0.475***	1.090***	0.117**
	(0.056)	(0.057)	(0.061)	(0.066)	(0.059)
Explained	0.148***	0.145***	0.135***	0.258***	0.021
	(0.032)	(0.036)	(0.041)	(0.048)	(0.035)
Unexplained	0.253***	0.134**	0.339***	0.832***	0.096
	(0.054)	(0.053)	(0.064)	(0.073)	(0.060)

Note: *** significant at 1 percent, ** at 5 percent, * at 10 percent; Standard errors in parentheses; MLI = Malian; NGA = Nigerian.
Source: Author's calculations using EHCVM (2018/19).

Firstly, to understand the importance of discrimination in determining refugee incomes, this paper compares the incomes of Nigerian refugees to IDPs using an Oaxaca-Blinker decomposition, with the outcome of this analysis shown in Table 34. As IDPs and Nigerian refugees are hosted in the same location and face similar pressures as new arrivals, comparisons between these groups account for the potential impacts of location and latecomer effects, with any 'unexplained factors' likely due to refugee discrimination. As Table 34 shows, the difference in income between Nigerian refugees and IDPs is entirely a consequence of explained factors, with the unexplained component of the model statistically insignificant. Nigerian refugees and IDPs are thus treated similarly, if not equally, with differences in their incomes the results of differences in endowment, rather than discrimination.

Next, this paper compares the incomes of Malian refugees and IDPs, again using an Oaxaca-Blinker decomposition. As Table 34 shows, 88 percent (0.711/0.81) of the differences in income between Malians and IDPs are due to unexplained factors. These unexplained factors may be a consequence of discrimination against Malian refugees; however, a more likely explanation is that the different locations between these groups is influencing their economic outcomes. With the overwhelming majority of IDPs in the EHCVM dataset (2018/19) residing in areas hosting Nigerian refugees, and not in areas hosting Malian refugees, the differences in location between IDPs and Malian refugees are unaccounted for in the model and are thus captured in the model's unexplained component. With discrimination insignificant in determining the incomes of Nigerian refugees, and with no reason to believe this is any different for Malian refugees, it is plausible that the location of Malian refugees is driving their inferior income levels. This is supported by comparisons between the areas hosting Nigerian and Malian refugees, with Nigerian refugees living in comparatively more fertile areas and having access to significant economic opportunities via the informal cross-border trade networks that exist with Nigeria, opportunities which are not available to Malian refugees (IMF, n.d; CBN, 2016).

Informal cross-border trade (ICBT) relates to unrecorded business transactions across borders. This trade forms an integral part of economic activity along the Niger-Nigeria border, with trade between the two countries comprising 75 percent of Nigeria's ICBT, equivalent to USD 2.4–3.4 billion per annum. Naturally, Nigerian refugees have a significant comparative advantage in these activities not afforded to Malian refugees, who live in comparatively poorer areas where cross-border trade is low (CBN, 2016; IMF, n.d.; World Bank, n.d).

TABLE 34: Regression outputs from Oaxaca-Blinker regressions of refugee populations (group 1) versus IDPs (group 2). The dependent variable is the log of pre-assistance daily consumption expenditure in 2017 PPP

	MLI refugees vs. IDPs	NGA refugees vs. IDPs
Prediction group 1	-0.389***	0.584***
	(0.026)	(0.031)
Prediction group 2	0.422***	0.422***
	(0.041)	(0.035)
Difference	-0.810***	0.162***
	(0.049)	(0.047)
Explained	-0.099***	0.111***
	(0.035)	(0.026)
Unexplained	-0.711***	0.050
	(0.049)	(0.044)

Note: *** significant at 1 percent, ** at 5 percent, * at 10 percent; Standard errors in parentheses; MLI = Malian; NGA = Nigerian
Source: Author's calculations using EHCVM (2018/19).

The analyses discussed above present a remarkable set of results: they show that despite refugees losing significant productive capacities because of displacement, refugees' lower incomes compared to hosts are more likely the result of differential returns on their endowments rather than a lack of endowments. These analyses also show that both IDPs and Nigerian refugees face similar levels of return on their assets. In other words, the differential returns experienced by IDPs and Nigerian refugees are comparable, implying that both are treated equally and that refugees do not face higher levels of discrimination because they are foreigners.

This is not to say that refugees do not face greater discrimination than IDPs in other areas of social and economic life. As Table 28 shows, the share of households with access to land is far lower among Nigerian refugees than IDPs. This may demonstrate some form of discrimination or reflect the desired economic activities and skillsets of Nigerian refugees, who may favor non-farm economic activity over agricultural work. Further information is necessary to understand these dynamics, but as this analysis demonstrates, Nigerian refugees and IDPs receive similar returns on their economic activity, which implies low levels of discrimination.

Comparisons between Malian refugees and IDPs, on the other hand, reveal a different story. The relative lack of prosperity and economic activity in the areas hosting Malian refugees are the most likely explanation for the large differences between Malian and IDP incomes. This explanation is further supported by a recent analysis from the WFP and UNHCR (2023), which finds that in northern Tahoua and Tillaberi, where most Malian refugees live, poor natural endowments significantly impede Malian agricultural activity. 100 percent of Malians in Tahoua and 63 percent in Tillaberi reported poor soil quality as a major constraint on their agricultural production, compared to just 46 percent of Nigerian refugees living in Maradi and Diffa, highlighting the importance of geography in determining refugee outcome (WFP and UNHCR, 2023).

Finally, given the importance of unexplained factors in determining the incomes of refugees, this paper estimates the impact on refugee and IDP poverty levels if FDPS endowments were renumerated at the same level as hosts. By assuming that FDPs and hosts have comparable access to labor markets, agricultural land, productive assets and other critical resources, this paper shows that FDPs' incomes, and by extension poverty, are likely to improve significantly if FDPs receive the same returns on their assets as hosts (see Table 35). This finding has significant implications around the use of humanitarian resources, which are likely to have a far greater impact on poverty if they are focused on generating economic opportunities for FDPs and eliminating impediments to IDP and refugee activity.

Meeting the subsistence needs of refugees and IDPs

The previous section demonstrates the significant impact that refugee economic activity can have on poverty levels. The international community is also able to raise the external assistance refugees receive to help meet their subsistence needs and reduce the levels of poverty they face.

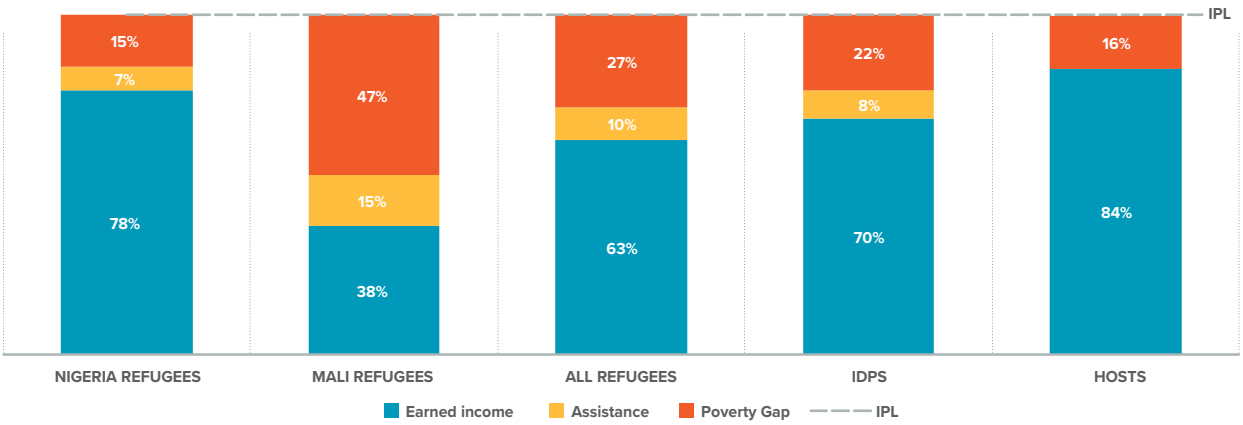
Using the poverty levels shown in Table 29, this section estimates the aid refugees and IDPs need to attain (i) an acceptable standard of living (i.e. meet the IPL), and (ii) have income levels that are comparable with the host community. As Table 29 shows, two-thirds (67 percent) of the refugee

TABLE 35: Poverty estimates assuming FDPs and hosts receive the same returns on their endowments. Poverty calculations using the IPL

	Actual data (income)		No differential treatment	
	Poverty Incidence	Poverty Depth	Poverty Incidence	Poverty Depth
Refugee (Nigeria)	62%	22%	48%	21%
Refugee (Mali)	95%	62%	61%	29%
IDPs	72%	31%	63%	28%
Hosts	51%	20%		

Source: EHCVM (2019).

FIGURE 48: Composition of consumption relative to the poverty line



Source: EHCVM (2018/19).

population in Niger live below the poverty line, with a poverty incidence rate of 52 percent for Nigerian refugees and 92 percent for Malian refugees, compared to 62 percent for IDPs. These estimates include external assistance, which elevates refugee and IDP incomes substantially.

As Figure 48 shows, while aid is essential in reducing the poverty levels experienced by refugees and IDPs, it falls short in bringing FDPs income levels in line with hosts. For refugee and IDP incomes to be comparable to hosts, external aid to refugees and IDPs would need to increase by 113 percent and 76 percent respectively. For refugees and IDPs to surpass host incomes and escape poverty, external assistance would need to increase by 220 percent, 320 percent and 270 percent for Nigerian refugees, Malian refugees, and IDPs respectively before their incomes to meet the IPL.

Using refugee and IDP population figures from end-2023, this paper estimates that an additional USD 28.5 million in external assistance is required to lift all FDPs (refugees and IDPs) to income levels comparable with the host population, equivalent to a 60 percent rise in external assistance.[67] By comparison, the additional assistance needed to bring refugees and IDPs to the IPL is estimated to be USD 107.2 million as of end-2023, equivalent to an increase in external assistance by 220 percent (EHCVM, 2018/19).

This analysis shows that aid, while critical, is substantially below the levels required for refugees and IDPs to meet an internationally recognized minimum standard of living (the IPL). In fact, if the subsistence needs of IDPs and refugees in Niger were to be met through aid alone, then a ten-fold increase in the level of assistance going to refugees, and a 12-fold increase in the level of assistance going to IDPs, is required. Given the superior contribution of earned income to total refugee and IDP incomes (i.e. earned income plus external assistance), overcoming the constraints FDPs face in generating income is essential for reducing poverty levels among these groups.

Discussion

As this paper has shown, self-employment in agriculture is most strongly associated with higher incomes among refugees, followed by self-employment in non-farm enterprises. Despite this, only 19 percent of refugees in Niger work in agriculture – less than half the proportion of IDPs and hosts working in the sector. This low level of agricultural activity may reflect a lack of available, quality agricultural land. Niger's rain-fed millet and sorghum belt has a high population density of 88 persons per square kilometer, surpassing the population densities of comparable, high-fertility areas in neighboring Chad and Mali (see Table 37 in Annex 1). With the population density of Niger's more fertile areas so high, access to quality agricultural land for refugees and IDPs will be harder to come by, with FDPs likely relegated to marginal plots with lower productivity, exacerbating the latecomer

67 Estimate assumes not only assume that the poverty gap remains the same as it was in 2019, but that refugees from Burkina Faso have the same poverty gap as the average Malian and Nigerian refugee in Niger in 2019.

effects these groups face. Yet as shown in Table 28, IDPs have superior access to land with land ownership twice as high among IDPs than among Nigerian refugees[68]. This may reflect the economic preferences of Nigerian refugees or indicate some form of discrimination by hosts against foreign refugees, with more data required to understand these effects in full. However, given the low levels of education among IDPs and refugees (see Table 28), and the rural areas they originate from, it is highly likely that agriculture and livestock farming are the preferred sources of income generation for large numbers of FDPs. Facilitating access to agricultural land through targeted assistance is thus likely to improve FDPS outcomes yet may be hindered by the current assistance model in Niger, which appears to draw refugees and IDPs to informal settlements where they are more likely to receive assistance. In situations where humanitarian organizations provide the main source of assistance and employment for refugees, an artificial, aid-driven economy typically develops, one that is not conducive to sustainable employment and economic activity. Under these conditions, self-sufficiency is likely to remain elusive and dependent on the presence of humanitarian organizations (Betts, 2021). To improve the earned income and self-sufficiency of refugees and IDPs, assistance should arguably be redirected towards more portable and market-based activities, such as unrestricted, portable cash assistance (i.e. no requirement to be in a certain location to receive assistance); investments in training and infrastructure; and facilitated access to plotted lands, programs which are far more likely to boost the financial autonomy and self-reliance of refugees and IDPs (Betts, 2021).

With information on the economic preferences and prior employment of refugees and IDPs lacking, the rationale behind the economic actions of FDPs is unclear. The paucity of economic data on Niger's refugees is exacerbated by a lack of information on FDPs outside of the EHCVM's sampling stratum, which does not include those residing in urban areas and outside of informal settlements. Without this information, it is not possible to fully understand the socioeconomic situation of refugee and IDP populations in Niger nor the host communities in which they reside. It is thus a strong recommendation of this paper that more detailed socioeconomic data collection be undertaken in Niger, focusing on both refugees, IDPs and hosts.

Conclusion

The current levels of external assistance received by refugees and IDPs in Niger is insufficient to meet the minimum subsistence needs of these groups. Instead, the largest contributor to poverty reduction for both refugees and IDPs is the labor market. As shown in Figure 48, earned incomes account for 63 percent and 70 percent of the income required for refugees and IDPs to meet their subsistence needs. By comparison, humanitarian assistance covers just 10 percent and 8 percent of the subsistence needs of refugee and IDPs, respectively. With aid limited, additional economic integration holds significant promise for increasing the incomes of refugees and IDPs and reducing the poverty and deprivation they face.

Under these circumstances, it seems prudent for the international community to invest in improving the economic productivity of refugees and IDPs. While the restoration of lost assets can improve FDPs' incomes, differential returns to endowments are driving the differences in incomes between refugees and hosts in Niger. In fact, 72 percent of the difference in pre-assistance income between refugees and hosts is a result of unexplained factors, with these differential returns likely the consequence of several factors, including poor economic environment, discrimination, and/or 'latecomer effects.' To fully understand these dynamics and the causes of differential returns between these population groups, further research into the social, cultural and economic interactions of refugees, IDPs and hosts is required and should be central to future evidence-generating efforts. Specifically, information on refugee and IDP economic activities pre-displacement, their current economic preferences, and information on the broader refugee and IDP population in Niger is gravely needed if policymakers are to make informed choices and recommendations on how best to improve FDPs' welfare and realize long-term, sustainable solutions to forced displacements in Niger.

68 As discussed earlier in this paper, Nigerian refugees and IDPs are located in the same region, allowing for comparisons between the groups.

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Appendix

TABLE 36: Condensed regression on the difference in log ratio of pre-assistance consumption to international poverty line by refugee, IDP, and host household characteristics

Characteristics	Hosts / IDPs / Refugees	Hosts	IDPs / Refugees	IDPs	Refugees
Age of head	0.003	0.008	0.001	0.004	-0.001
	(0.002)	(0.004)	(0.002)	(0.002)	(0.002)
Head is female	-0.065	0.084	-0.095	-0.158	-0.113
	(0.079)	(0.210)	(0.079)	(0.125)	(0.093)
Head is married	0.010	0.213	-0.024	-0.165	0.019
	(0.078)	(0.208)	(0.077)	(0.123)	(0.091)
Household size	-0.086***	-0.094***	-0.085***	-0.066***	-0.100***
	(0.011)	(0.020)	(0.014)	(0.015)	(0.018)
Share of dependents (young & elderly)	-0.842***	-0.877***	-0.811***	-0.723***	-0.931***
	(0.110)	(0.206)	(0.129)	(0.185)	(0.163)
Semi-qualified/Qualified (educ ≥6)	0.208**	0.328***	0.119	0.165	0.172
	(0.091)	(0.123)	(0.114)	(0.109)	(0.186)
Head employee in agriculture	-0.088	0.012	-0.067	0.041	0.014
	(0.083)	(0.223)	(0.092)	(0.148)	(0.116)
Head employee in industry	-0.029	0.248	-0.050	0.072	0.035
	(0.064)	(0.191)	(0.067)	(0.122)	(0.083)
Head employee in services	0.207***	0.277	0.202***	0.308***	0.284***
	(0.069)	(0.192)	(0.072)	(0.118)	(0.092)
Head is self-employed	0.245***	-0.078	0.282***	0.211*	0.235**
	(0.066)	(0.151)	(0.071)	(0.117)	(0.094)
Household engaged in non-farm in agriculture	0.432***	0.374***	0.369***	0.128	0.495***
	(0.053)	(0.088)	(0.065)	(0.092)	(0.106)
Household engaged in non-farm	0.245***	0.361***	0.214***	0.054	0.295***
	(0.055)	(0.114)	(0.062)	(0.086)	(0.089)
Constant	0.832***	0.786**	0.887***	0.978***	0.936***
	(0.129)	(0.307)	(0.136)	(0.191)	(0.185)
Observations	1859	303	1556	465	1091
Adjusted R-squared	0.307	0.350	0.299	0.298	0.326

Note: *** significant at 1 percent, ** at 5 percent, * at 10 percent; Standard errors in second row. *Source:* EHCVM (2018/19).

TABLE 37: Spatial characteristics in the Central Sahel, by country

Mali	Population	Pop. share	Area	Pop. density	Night time light	Temp	Rainfall	Elevation	Travel time
Desert	53,175	0.3%	301,259	0.2	0.17	40.5	47	232	5706
Migratory livestock	400,433	2.0%	414,107	1.0	0.16	40.3	125	230	1570
Arid agriculture, livestock	5,663,280	28.0%	302,870	18.7	0.16	38.7	419	234	267
Arid, millet and sorghum	610,395	3.0%	15,462	39.5	0.16	38.1	627	232	135
Fishing and irrigated agr	884,496	4.4%	8,018	110.3	0.18	33.9	622	235	74
Cotton	1,703,386	8.4%	27,725	61.4	0.15	36.6	977	230	94
Semi-arid agriculture	5,818,726	28.8%	185,272	31.4	0.23	36.5	980	232	145
Urban	5,102,668	25.2%	825	6182.0	5.66	36.7	929	230	8
Burkina Faso									
Desert	-	-	-	-	-	-	-	-	-
Migratory livestock	388,581	1.9%	15,069	25.8	0.15	38.2	430	234	184
Arid agriculture, livestock	2,823,916	13.5%	48,739	57.9	0.14	37.9	591	233	115
Arid, millet and sorghum	4,698,411	22.5%	47,700	98.5	0.16	37.5	810	233	84
Fishing and irrigated agr	75,024	0.4%	927	80.9	0.21	32.9	973	236	66
Cotton	2,344,933	11.2%	38,102	61.5	0.17	36.9	959	231	80
Semi-arid agriculture	6,409,084	30.7%	121,947	52.6	0.17	36.7	945	234	128
Urban	4,166,101	19.9%	730	5703.9	5.85	37.5	902	231	7
Niger									
Desert	158,908	0.7%	492,353	0.3	0.16	39.9	23	214	2207
Migratory livestock	680,016	2.8%	349,426	1.9	0.15	40.6	102	223	1589
Arid agriculture, livestock	2,812,199	11.6%	135,738	20.7	0.14	38.8	303	229	372
Arid, millet and sorghum	18,063,554	74.6%	205,187	88.0	0.14	37.2	423	229	173
Fishing and irrigated agr	17,156	0.1%	1,353	12.7	0.15	30.8	248	235	230
Cotton	1,909	0.0%	24	78.4	0.14	33.4	771	243	180
Semi-arid agriculture	94,468	0.4%	3,477	27.2	0.41	36.5	752	238	348
Urban	2,394,954	9.9%	508	4715.9	4.99	37.0	505	233	7
Chad									
Desert	22,692	0.1%	115,976	0.2	0.15	40.5	18	204	1949
Migratory livestock	1,072,437	6.5%	581,287	1.8	0.14	40.0	60	212	1431
Arid agriculture, livestock	6,288,575	38.2%	292,253	21.5	0.13	39.7	433	223	338
Arid, millet and sorghum	166,686	1.0%	5,433	30.7	0.11	39.1	601	230	140
Fishing and irrigated agr	100,452	0.6%	3,884	25.9	0.12	29.0	384	234	224
Cotton									
Semi-arid agriculture	7,434,662	45.1%	272,510	27.3	0.18	37.3	959	226	267
Urban	1,388,021	8.4%	292	4756.6	5.39	37.3	554	233	13

Source: Doherty et al. (2024).

TABLE 38: Descriptive statistics for those involved in household agricultural production

	Land ownership (%)	Land title (%)	Land size (ha)	Time to plot (minutes)	Soil type: sandy (%)	Soil type: silty (%)	Soil type: clayey (%)	Intercopping on land (%)
Refugee (Nigeria)	1.8	0.0	1.1	47.8	65.0	11.5	21.4	20.4
Refugee (Mali)	0.0	0.0	0.9	52.3	74.2	0.0	25.8	55.4
Refugees total	1.7	0.0	1.1	47.9	65.3	11.0	21.6	21.8
IDPs	16.8	0.0	1.2	48.1	82.9	4.3	11.1	21.7
Hosts	77.1	0.0	1.4	44.1	67.6	18.9	13.2	16.2

Source: EHCVM (2018/19).

The Displaced of Yemen:

Telling their Story from Diverging Data

CHAPTER 2.9

The Displaced of Yemen: Telling their Story from Diverging Data[69]

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Abstract

The conflict in Yemen, which began in 2015, has resulted in significant internal displacement, with varying estimates of the number of displaced persons due to differences in survey methodologies, definitions of displacement, and data coverage. This chapter explores the challenges of capturing accurate data on internally displaced persons (IDPs) in Yemen and demonstrates how different data sources can be utilized to answer questions related to the welfare of the displaced. By leveraging an internet-based survey, phone surveys, qualitative interviews, and remote sensing of displacement sites, the study provides insights into the experiences and needs of IDPs, the changes in population and dwelling conditions over time, and the implications for policy and humanitarian interventions. The findings highlight the importance of comprehensive data collection and monitoring to effectively address the complex and evolving needs of displaced populations in Yemen.

Editors' Note: *Through a rich set of complementary data approaches, the Yemen case demonstrates how data can be collected on internally displaced persons even during conflict. The innovative, multi-pronged approach is instructive both for its dedication to generating critical data, as well as showing how approaches developed in more stable environments can be adjusted to inform a volatile, dynamic context. Finally, though explored less in this chapter, the Yemen case also demonstrates the value of data partnerships in creating a broad-based data ecosystem.*

69 The authors gratefully acknowledge the generous support and funding from the WB-UNHCR Joint Data Center and the Yemen Multidonor trust fund.

Introduction

The last time a census was conducted in Yemen was in 2004. Even if the current conflict, which has been ongoing since 2015, had not caused a massive upheaval to the population of the country, this census would be considered out of date.[70] The majority of Yemenis live in poverty and dire conditions, as the war has torn apart lives, livelihoods, homes, infrastructure, and the means to survive (World Bank 2024). This has resulted in large scale internal displacement, as Yemenis seek safety and opportunities elsewhere.

However, while the scale of internal displacement is undoubtedly large, there are varying estimates of the number of displaced according to various data sources. The latest Humanitarian Needs Overview (HNO) suggests that 14 percent of the population, or 4.6 million Yemenis, are currently displaced (UNOCHA 2024). The Yemen Human Development Survey 2021 finds that eight percent of households are displaced, but this is representative of areas controlled by the Internationally Recognized Government (IRG) which have seen less displacement than Houthi-controlled areas. Phone surveys suggest even higher numbers: The monthly WFP phone surveys show that at a minimum 29 percent and at maximum 41 percent of the population were displaced between 2016 and 2021 (Favari et al. 2023), and the World Bank phone surveys suggest that 23 and 25 percent of Yemenis were displaced in rounds I and II (World Bank 2023a; 2023b) multiple challenges - including shrinking access to income, disruptions in imports, and further currency depreciation, have exacerbated the precarious living conditions of Yemenis. This report briefly describes the results of a phone survey completed in August and September of 2022, showing the precarity of living conditions and livelihood options across the country, but highlighting worse conditions amongst parts of the population. Employment conditions and food security are worse off in rural areas, amongst the displaced and in the areas under Houthi control. Those working in elementary occupations and in the construction, manufacturing or agriculture sectors are also worse off. Amid a devastating and protracted conflict, with limited information on the living conditions in Yemen, a phone survey was carried out to monitor food insecurity and livelihoods. The survey, implemented in August and September 2022, seeks to provide a snapshot of the situation for Yemeni households. The survey draws on a probability sample of 1,297 respondents, 623 of whom are based in rural areas, while 480 and 193 are living in urban and semi-urban areas respectively. Most of the respondents are male (1,045 men vs. 252 women.

Capturing the prevalence of displaced persons is notoriously difficult (World Bank 2017), and the difference between the estimates might be due to differences in survey methodologies, definitions of displacement, and coverage/representativeness of the data. For example, official estimates are based on key informant interviews at the sub-district level, while other methodologies are based on household level respondents. The divergence could also be driven by different definitions and interpretations of forced displacement according to households, key informants, or survey interviewers. Some definitions and interpretations could consider internal displacement when indirectly caused by conflict, such as through the loss of livelihoods, while others might consider displacement as being directly caused by conflict and violence.

Amid such a wide range of estimates of the prevalence of displacement, we seek instead to demonstrate how different data sources can be used to answer different questions related to the welfare of the displaced. By exploring an internet-based survey using Random Domain Intercept Technology, two rounds of a phone survey, qualitative interviews with randomly selected displaced families, and remote sensing of displacement sites, we can answer questions such as: What is the experience of displacement? What are the most pressing needs? How do these needs differ compared to those non-displaced? How has the population, infrastructure and dwelling conditions of IDP sites changed over time? We conclude by highlighting promising avenues for further data collection and monitoring.

70 International best practice would recommend a census be conducted every decade, usually within a so called census round (UN Handbook on the Management of Population and Housing Census 2020).

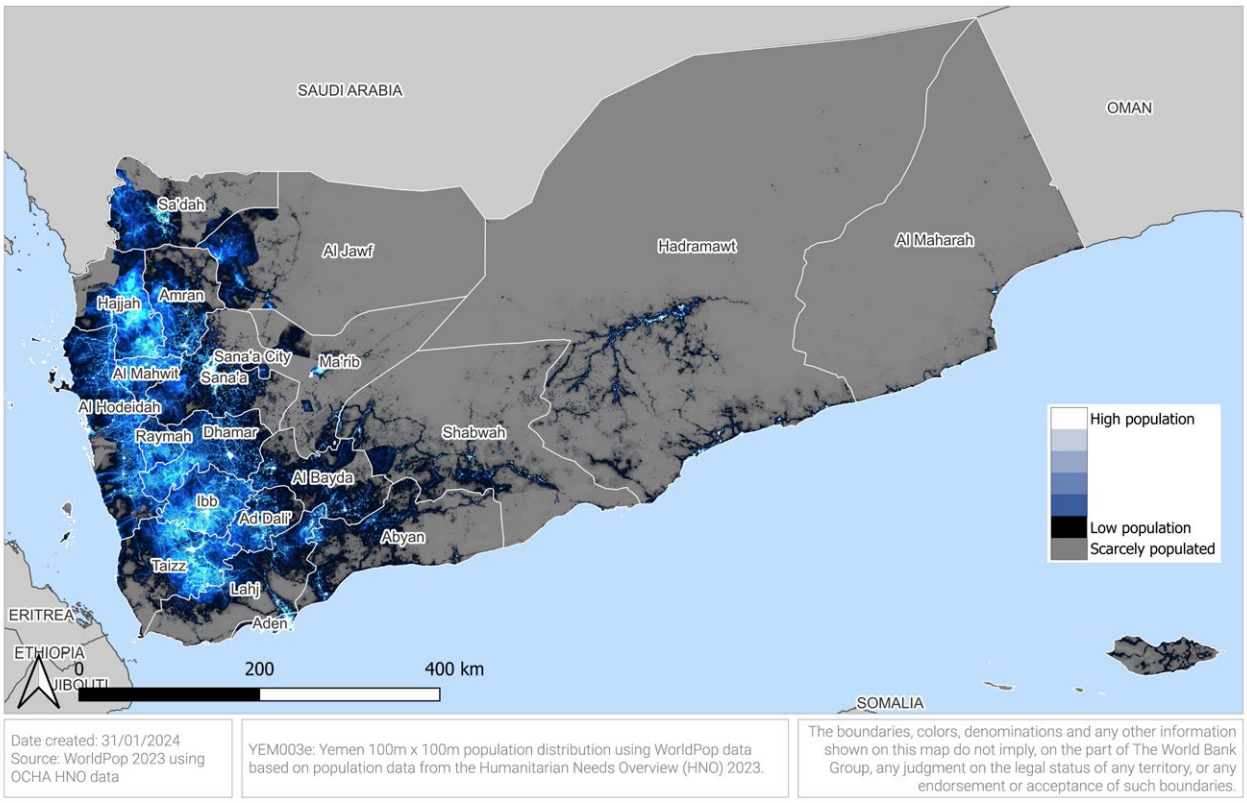
Observing from space

In the first instance, it is important to have a sense of the scale of the displacement problem. As mentioned earlier, there are varying figures for the number of displaced in Yemen. We first offer a method to calculate changes in IDP population in a known IDP camp in the Marib governorate of Yemen. This relies on temporal high resolution population data, at a 100 m resolution estimated using a top-down constrained methodology, derived from governorate level population figures published by the 2024 HNO (UNOCHA 2024). The HNO calculates population figures at a district level using official projections from the Central Statistics Office from the 2004 population census, in addition to adjustments made for internal displacement. Using a range of geospatial covariate layers, the district level figures are then used to estimate the population within a 100m by 100m cell. These geospatial layers include: OpenStreetMap, Microsoft Building Footprints, Global Human Settlement Layer (GHSL), night lights (Visible Infrared Imaging Radiometer Suite (VIIRS)), distance to roads, and built-up surface and volume.[71] Figure 49 shows the estimated countrywide population distribution throughout Yemen in 2024.

Analyzing the population raster datasets over multiple years can then be used to estimate the growth of known IDP camps. A case study from Marib in Yemen, explains how such monitoring can be undertaken. In January 2020, an escalation of fighting on the outskirts of Marib, Al Jawf and Sana'a governorates led to a surge in displacement, with many of those being displaced for the second or third time (ACAPS 2021). In September 2020, Satellite Applications Catapult carried out a remote monitoring assessment of IDP sites in Marib (Satellite Applications Catapult 2020). The analysis identified 47 IDP sites with the largest area identified being Al Jufainah IDP camp located to the southwest of Marib city (Figure 50).

Satellite imagery analysis from Al Jufainah camp shows a significant increase in the number of structures between February 2020 and October 2023 (Figure 51). Through the mapping of these

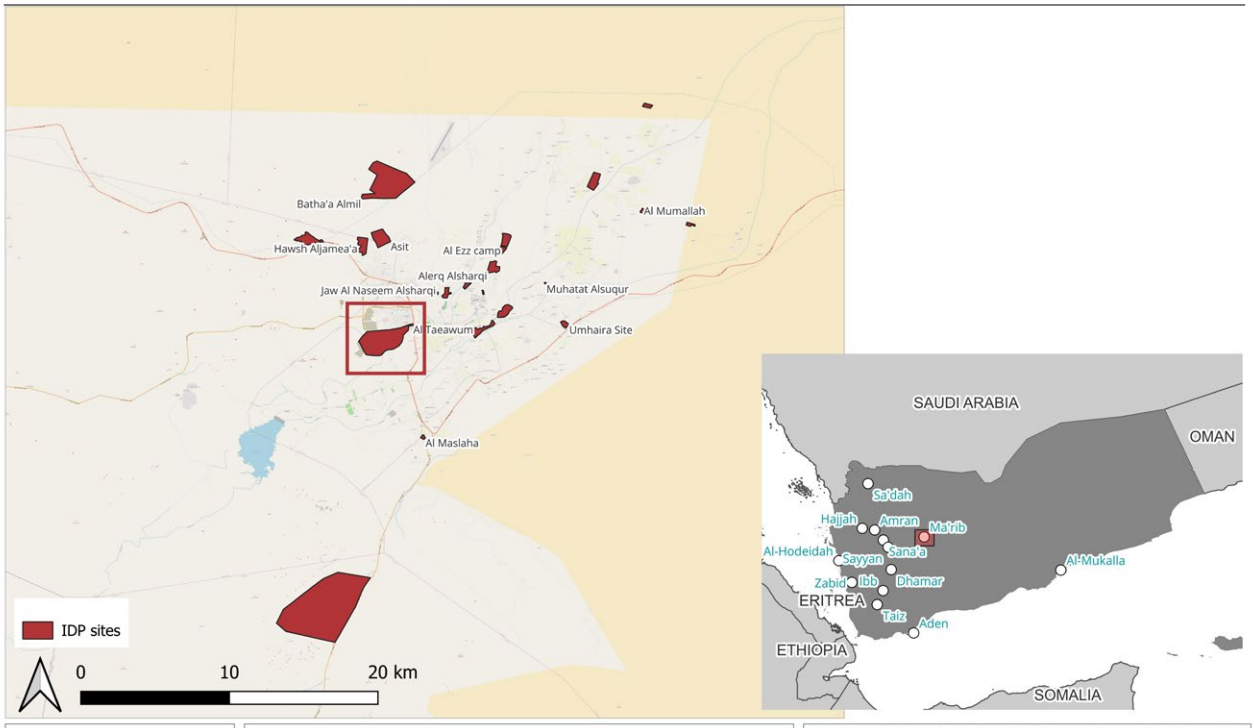
FIGURE 49: 100 m resolution population distribution in Yemen in 2024



71 Stevens, et al. (2015) provides a full summary of the WorldPop methodology, and Yemen 2024 data is available online.

structures in platforms, such as OpenStreetMap (OSM), with the support of organizations, such as Humanitarian OpenStreetMap, Microsoft and Meta,[72] this data can be used to estimate population change overtime. Previously, small settlements and isolated buildings were consistently missed from platforms such as OSM, making such datasets a poor basis for defining the absence of residential populations. However, an increase in the completeness and quality of building data is now making it feasible to use building data as a mask to identify isolated populated areas over recent time periods.

FIGURE 50: Aljufainah camp (Satellite Applications Catapult, 2020)



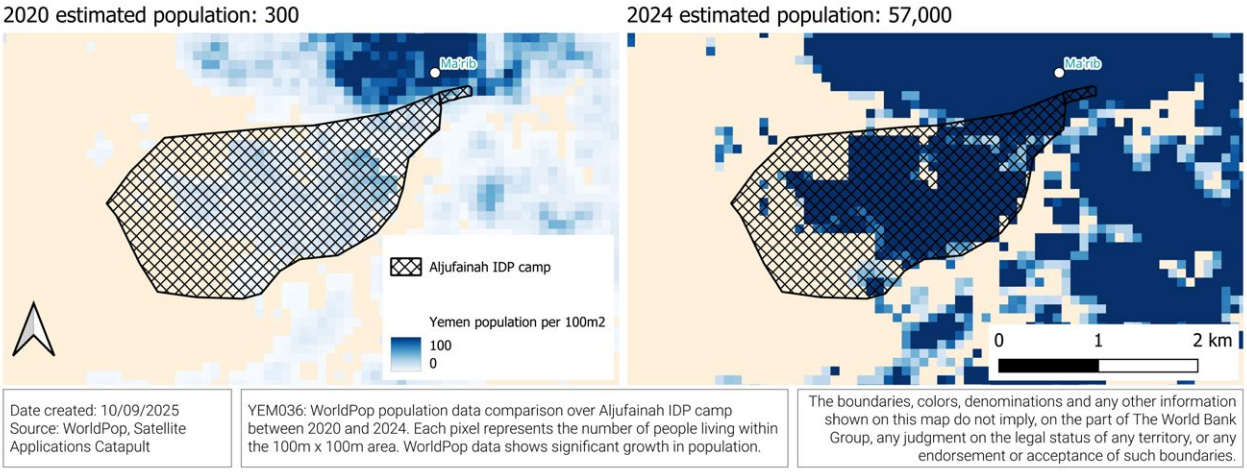
Date created: 10/09/2025 Source: Satellite Applications Catapult	YEM034: Aljufainah IDP camp location	The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

FIGURE 51: Comparison of satellite imagery over Al Jufainah IDP camp between March 2020 and October 2023

Date created: 10/09/2025 Source: Google Earth, Maxar Technologies, Airbus	YEM035: Aljufainah IDP camp satellite imagery comparison.	The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

72 See for example: https://tech.facebook.com/artificial-intelligence/2020/3/map-with-ai-updates/

FIGURE 52: Comparison of WorldPop population estimates for Al Jufainah IDP camp between 2020 and 2024



Through the usage of WorldPop 100m resolution population data, it was possible to compare population estimates from 2020, where the number of buildings in Al Jufainah IDP was low, to estimates from 2024. Through analyzing the population within each 100 m grid within the area of the Al Jufainah IDP camp, it was estimated between 2020 and 2024 the population increased from approximately 300 to approximately 57,000 people (Figure 52). The IOM estimated 5,540 households living in Al Jufainah camp between January and February 2020 (IOM Yemen 2020). With a national average household size of 6.5 (CSO and UNICEF 2023), this is around 36,010 displaced persons, not far off from the number estimated from satellite imagery.

Although high resolution population figures can be estimated through building density data, the underlying overall population figures are based on district and country level population estimates. Unfortunately, accurate population data is one of main data gaps in the country, as there has not been a population census since 2004. The Household Budget Survey conducted in 2014 was used as a partial update, but large scale internal and external migration and displacement over the course of the conflict is likely to have affected these numbers. This means high resolution population estimates could be skewed by outdated countrywide population figures, particularly if displacement has occurred across district boundaries.

Nonetheless, the approach of using temporal satellite imagery to estimate population changes proves to be very promising. This approach can be expanded to other known IDP sites in Yemen and can be used regularly and cheaply to estimate changes in population. This can enable analysts to identify areas where the population has significantly increased and therefore support the identification and estimated population of highly vulnerable communities. Additionally, if the characteristics of dwellings can be observed within a sample, this could also be extrapolated to larger areas to estimate changes in dwelling conditions over time.

While the use of satellite imagery does prove to be promising, it is even more pertinent not to lose sight of the human experience behind the numbers. This is often forgotten but can be even more invisible when observing snapshots in time from space. The analysis of satellite images should be complimented by data points from individuals. In the next sections we explore what can be learnt from phone interviews, qualitative data, and respondent-completed internet surveys.

Interviewing over the phone

Phone survey data can be collected regularly for a fraction of the price of a face-to-face survey. While the use of phone surveys took off during the COVID-19 pandemic, when data collection was not possible, it has been used in FCV settings even earlier than that. In Yemen, the mobile Vulnerability Analysis and Mapping (mVAM) data has been collected every month since 2015 through a combination of

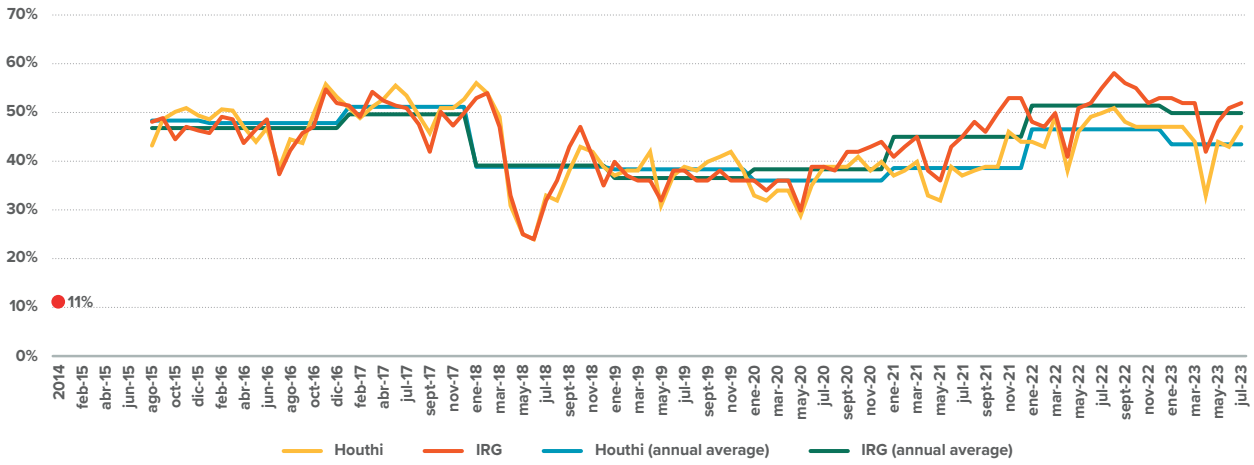
random digit dialing and panel households (who would have originally been contacted by random digit dialing). Although implemented by phone, mobile phone ownership is widespread in Yemen, making phone surveys appropriate in a landscape of limited face-to-face collected data. The 2023 MICS finds that 86 percent of households have access to a mobile phone (up from 81 percent in 2014) (CSO and UNICEF 2023). Most governorates have household level mobile penetration above 75 percent, except for Abyan, Raymah and Socotra. Despite relatively decent mobile phone penetration, the general biases of phone surveys still apply. Respondents tend to be more urban and educated than the general population, and richer households are more likely to have a mobile phone according to the MICS 2023. While survey weights can mitigate this bias, this does not always sufficiently mitigate bias stemming from the overrepresentation of richer respondents.

Longitudinal data can be used to observe trends. As seen in Figure 53, Yemen's hunger and poverty crisis unfolded over four distinct phases:

- By August 2015, after just a few months of war, 48 percent of Yemenis had a poor food consumption score, a more than four-fold increase from the year before, in line with a broader collapse in economic output.
- Food insecurity reached its lowest point in 2018 when the war's physical and economic dimensions intersected. Yemen's IRG sought to seize control of one of Yemen's biggest ports, Hodeidah, tightening control over imports.
- After improvements in 2019 and 2020, in part due to a huge influx of aid, the situation deteriorated due to several major shocks: the Houthis' military campaign in Marib, the COVID-19 pandemic, the 2022 Russian invasion of Ukraine and accompanying price shocks, declining funding for international aid, and the depreciation of the Yemeni Riyal in areas controlled by the IRG.
- Food insecurity has improved since a truce was announced in 2022, but Yemen remains among the countries with the most hunger in the world, with around half of the population suffering poor or inadequate food consumption.

A further added value of the mVAM data is its panel nature and the ability to track displaced households before and after the displacement event. The WFP monthly monitoring panel survey reaches a substantial number of households that were not displaced at first but become displaced in subsequent interviews. Figure 54 summarizes evidence from D'Souza et al. (2022) and Favari et al. (2023) and reveals three important patterns illustrated in the evolution of food access:[73]

FIGURE 53: Prevalence of inadequate food consumption score (FCS) (2014- July 2023). Higher is worse



Source: Extracted from WFP regular monitoring phone surveys, available online from 2018 onwards. Data point for 2014 is calculated from the HBS 2014.

73 These results are robust to considering the potential selection bias of displaced households represented in the phone surveys, as food security prior to displacement is uncorrelated with the likelihood of participating in subsequent surveys (D'Souza et al. 2022).

- **First, food access was very stable before displacement.** This suggests that households becoming displaced due to the humanitarian situation or looking for better opportunities are not doing so in response to a sharp change in well-being, on average.
- **Second, a sharp decline in food access in the month of displacement lasts for up to three- to four- months following displacement.** In the month of displacement, the average Food Consumption Score (FCS) worsened by 11 percent and the average reduced Coping Strategy Index (rCSI) worsened by 17 percent—large declines from an already very low base.
- **Third, despite having worse food outcomes compared to those never displaced, food access for displaced Yemeni households rebounds relatively quickly.** Four months following displacement, food access is statistically indistinguishable from the month before displacement.

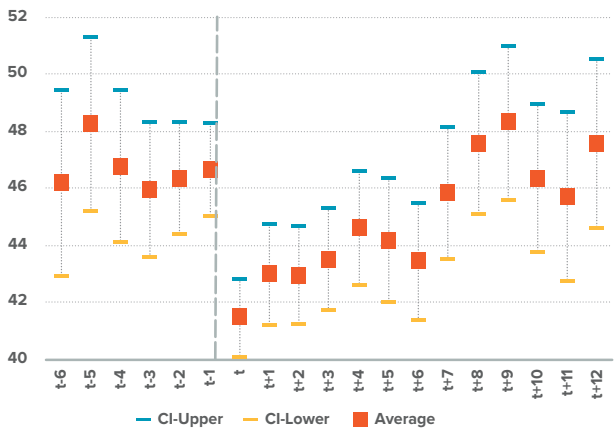
Voices from the ground

Following the completion of a World Bank phone survey (World Bank 2023b) implemented between January and March 2023, aims to provide an update on the welfare of Yemeni households. The survey draws on a probability sample of 1,455 respondents, 711 of whom are based in rural areas, while 467 and 277 are living in urban and semi-urban areas respectively. Most of the respondents are male (1,116 men versus 339 women, 30 respondents were randomly selected for a follow up semi-structured interview and 28 remote interviews were carried out. These semi-structured interviews used a topic guide that covered topics such as food, employment, displacement, and overall coping strategies. Interviewers were recruited via a third-party data collection agency. The interviewers were given three days of intensive training to familiarize themselves with the study's purpose, topic guide, interview techniques, and etiquette. Before making the calls, they were also briefed about the profile of the participants so that the interviewer could build rapport quickly. Transcripts of the interviews, which lasted between 15 to 45 minutes, were read several times for data familiarity and to identify patterns to derive themes and sub-themes. The transcripts were then coded using the qualitative software *Dedoose*. The results of this analysis revealed harrowing and varied stories of displacement amongst 17 respondents, summarized as follows.

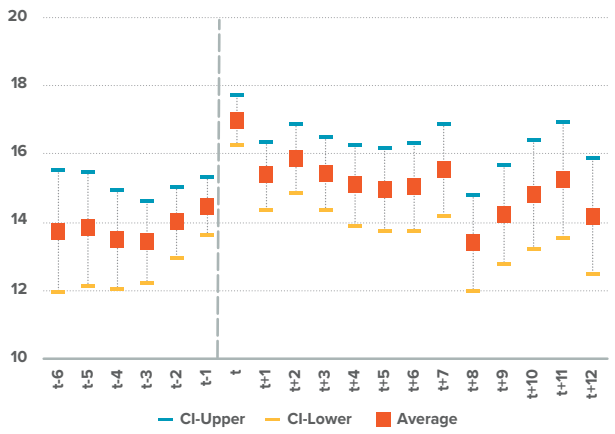
Most respondents were displaced due to the conflict itself or due to indirect conflict events, such as increased prices and unemployment. They decided to migrate when they experienced violence firsthand or expected that the violence was near

FIGURE 54: Food consumption score and b) reduced coping strategy index, leading up to and following displacement

a. Average FCS by period of displacement - Higher is better food access



b. Average rCSI by period of displacement - Higher is worse food access



Source: Surviving in the Time of War (Favari et al. 2023).
Note: t averages the food security score for the month of displacement of each household, while t-2 represents two months prior to displacement and t+2 represents two months after displacement (as an example).

them in the form of loss of lives or destruction of property. Many fled in fear to keep their families safe. A male respondent from Al-Beida summarized:

> *"We moved after the war to the city. Everyone was moving. Some people died there and those who wanted to live moved. [Our house] was destroyed in the war and we all moved."*

Permanent displacement occurs when violence has been so damaging that the displaced have nowhere to return to or cannot re-enter the area due to ongoing fighting and blockades. Often their dwelling or much of the neighborhood was destroyed in aerial bombardment, which also resulted in loss of lives. A male from Raimah, who was displaced from Sana'a, recalls his experience:

> *"I (with my wife and kids) moved out of Sana'a. Everything was lost. We had no electricity, water, or anything. I did not go back to Sana'a."*

The reasons for temporary displacement were similar to permanent displacement, but often Yemenis left their homes in anticipation of violence. They returned once the fighting stopped, or when the fighting had moved away from their areas. They came back to dwellings that were not severely damaged to resume the life they had left behind. A male respondent from Marib, who was temporarily displaced due to the war, returned to Marib in 2016 and described the painful process of displacement:

> *"I escaped the war [...] We were not allowed to [go back] due to the war. We all moved away. No one stayed in Marib. I was on my way to Marib. The aircraft shelled our homes. My family was at home, and we had to flee the war. I went back to Marib in 2016. The whole of the town was destroyed."*

Displacement has taken many forms. In some cases, a few family members, usually men, stayed back to look after their houses and land. Sometimes other family members either fully or partially moved back to their native area after being displaced for some time. If people migrated to cities and they could not afford to live there, they returned to their native area or moved elsewhere. Some discussed being displaced more than once and needing to move again to an area where they could hope to find livelihood options. A male respondent from Al Beida describes the reason and process of displacement and the difficult reality of the high cost of living, especially as IDPs:

> *"We had to leave our town because of the air raids that destroyed our homes. We had four homes. We were terrified and used to cry. Our life is very tough here and there. My mother passed away. The rent is also very expensive. We cannot afford that. We struggle to find food, then how about paying the rent. [...] All of us moved, even my in-laws. From Raada we first moved to a house that was expensive to rent, then we moved to another house where we could afford to pay the rent. It is difficult to live everywhere in Yemen."*

Extended family and kinship were key enablers that facilitated displacement. People moved to places where they had extended families or social networks that could help them set up temporary or permanent living arrangements. Of course, not all could benefit from extended family and kinship networks. In those cases, they resorted to living in tents, either in camps or outside. The generosity of extended family and kinship, host community members—and in some cases even strangers—helped people find shelter, food, and other basic needs. Some also mentioned receiving help from organizations when they were IDPs, but not after they returned to their native areas. A male respondent from Al-Mahwit describes the temporary nature of the movement, decision-making, and enabling factors that facilitated the process:

> *"The bombardment was near our neighborhood in [Name of the Street and Area]. A missile hit next to our house, it was our neighbor's house, which is only two units away from my own house, four people died in that house. It was raining bullets and some bullets would go through our house. We were all scared. Our house roof went down (half a meter down), and we did some mending to it. We decided to move, we rented in the [Name of the Street and Area in a different district]. We first took the women and children to the new house we rented, and we kept going back and forth to pack our stuff. After a while, the conflict expanded to reach our new place, so we had to leave the whole governorate Hodeidah.*

We all moved, my cousins, and brothers, each went to different places. I moved to Al Mahwit, which is my grandparents' hometown. We still have our grandparents' house there, but my cousins went to Sana'a."

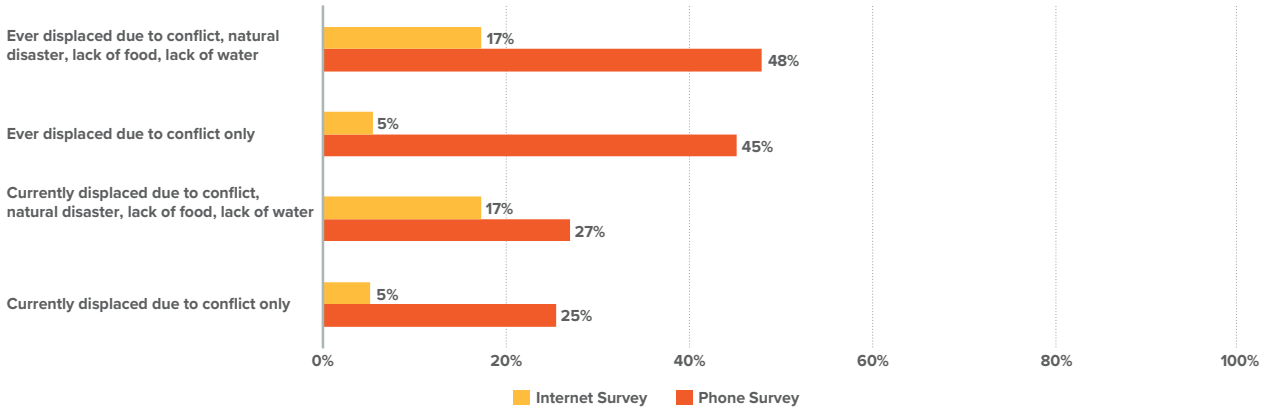
Qualitative data has some limitations. Qualitative data does not claim to represent the population at large. Instead, it aims to provide rich and nuanced lived experiences, thoughts, and viewpoints. It also helps the reader understand context, provides insightful explanations to understand a phenomenon, or further explain quantitative findings, or guide future lines of inquiry. In this case, the voices from the ground provide several accounts of the forms that displacement can take, perhaps explaining why it has been so difficult to capture displacement status in a survey. Displacement can be temporary and continuous, break down families, and likely to be caused by a confluence of factors rather than a single violent event.

Connecting online

A final data source to consider is an internet-based survey implemented by RIWI. This survey delivered anonymous opt-in surveys to Web users surfing online. When users land on one of the hundreds of thousands of active and inactive domains that RIWI owns or controls at any given moment, these random users are filtered through a series of proprietary algorithms to ensure there are no non-human respondents and invited to participate in a language-appropriate survey. 3,000 respondents completed a short perceptions-based questionnaire on the war economy and incentives for joining armed groups. Data is then adjusted using sampling weights which mitigate some of the bias caused by oversampling young men living in urban areas. However, like phone surveys, many of the limitations on representativeness remain and are perhaps exacerbated as internet penetration is much less than phone penetration. Nonetheless, this type of secure and anonymized data could be useful for capturing opinions and perceptions that respondents might otherwise be uncomfortable sharing with an interviewer. A similar survey conducted in the West Bank and Gaza highlights the pros and cons of this approach (Finn, Anderson, and Aghajanian 2023).

In Yemen, the internet-based survey asked respondents whether they *"are currently living in the same place as you were in 2014?"* followed by asking about the reason of the displacement, including conflict (bombardment, fighting, destruction of the house…), work, marriage, separation of the household, study, natural disasters, lack of food and lack of water. Those who have been displaced due to conflict are only 5 percent of the weighted sample, which is much lower than the 25 percent reported as being displaced due to conflict in a phone survey conducted around the same time. When also expanding the reasons for displacement to include natural disasters, lack of food or lack of water, the prevalence is a lot higher and closer to the phone survey (Figure 55). It is noticeable that this difference is more pronounced when considering those who were ever displaced.

FIGURE 55: Prevalence of currently and ever displaced by data source



Source: World Bank Phone Survey II and RIWI internet survey 2023.

This discrepancy is likely to arise from 2 sources: i) the representation of the sample – internet respondents are younger, more likely to live in urban areas and Houthi areas, more educated but less likely to be working. These characteristics are also likely to be associated with displacement status. A further source is ii) the mode of data collection could cause sensitivity bias or misreporting. When speaking with an enumerator, the reasons for displacement could be exaggerated because the respondent might expect a benefit. Or the respondents might not carefully review and understand all the displacement reasons available to them, which might explain why the prevalence of displacement is closer when considering conflict, natural disaster, lack of food and lack of water. An enumerator will be able to probe the reason more carefully to ensure all cases of conflict induced displacement are captured.

While internet survey data does not seem promising for capturing conflict induced displacement satisfactorily and will require a large sample size to capture enough IDPs to make statistical inferences, the data could be used for analyzing perceptions, such as intention to return or challenges related to settlement and integration. Phone surveys and face-to-face surveys should also mitigate for sensitivity bias and misreporting by clearly explaining the purpose of the survey and how there are no benefits associated with responses.

Policy implications and conclusions

Amid a protracted conflict and economic crisis, Yemen's large, displaced population faces unique and entrenched vulnerabilities that requires support. This effort also requires data and statistics for informed decision making, resource allocation, better planning and targeting, monitoring and evaluation, and advocacy and awareness. The conflict has also caused widespread destruction of infrastructure, limited access to certain regions, and fragmentation and weakening of institutions. This has led to a weak traditional national statistical system, with no official statistics on poverty and welfare of IDPs and non-IDPs. Instead, data users have had to rely on a variety of unique and novel data sources.

This chapter has considered how different data sources can be used in an environment that makes face-to-face surveys (the gold standard) challenging. Each data source has advantages and disadvantages that should be considered when using and interpreting the results. Satellite imagery can be used to provide a quick and approximate estimate of population changes caused by displacement, which could be immensely helpful when planning emergency humanitarian relief for those living in displacement camps or settlements. Phone surveys are immensely useful to examine long term trends and identify major shocks in key indicators such as food security, in addition to tracking households before, during and after their displacement. Qualitative interviews have provided a richness and understanding of how individuals have experienced displacement, their priorities, prospects and main challenges. Finally, internet surveys, while the least promising in terms of capturing displaced respondents and an accurate prevalence of displacement, can be used to capture opinions and perceptions that might not be revealed in the presence of others.

In conclusion, the importance of having accurate and comprehensive data on IDPs cannot be overstated. It is the foundation for effective policy-making and tailored interventions. As demonstrated in the report, leveraging various data sources provides a nuanced understanding of displacement, which is crucial for addressing the complex and evolving needs of IDPs in Yemen. Policymakers and humanitarian organizations must prioritize data collection and analysis to ensure that their efforts are grounded in evidence and can effectively support displaced populations.

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