



A 10-year-old Somali refugee girl in a classroom in Awbarre refugee camp, Jijiga, Ethiopia. She couldn't go to school in war-torn Mogadishu, Somalia and is enjoying her studies in the refugee camp.



6 Information Management in UNHCR: From Data to Protection

WHILE UNHCR HAS collected and managed information for years, the methods and tools used have changed over time. Technological advancements have changed the way the organization collects and communicates information. As a consequence, UNHCR's approach to data collection, processing, analysis and dissemination has changed as well.

Recent effort to improve data management is the objective of the High Commissioner's Information and Data Management Strategy 2012-2014. The strategy builds upon the organization's existing strengths and systems – such as population data management, geographical information analysis, the Gender Based Violence Information Management System (GBVIMS),⁶⁸ standards and indicators reporting, registration software *pro-Gres*, and the web-based Health Infor-

mation System (HIS)⁶⁹ – and promotes areas new to UNHCR. The strategy is designed to support field operations in fully assuming the organization's responsibilities for leading and coordinating information management (IM) in various contexts and continues to strengthen IM as a core responsibility of the organization. Through the Strategy, UNHCR aims to become a responsive and predictable provider of information products to those providing protection and assistance to persons of concern.

This chapter provides an overview of the principal objectives of UNHCR's Information and Data Management Strategy and its potential use to inform and support protection and assistance activities in the field. The case studies Ethiopia and Côte d'Ivoire illustrate the importance and impact of Information Management in support of evidence-based decision-making in an emergency context.

BACKGROUND

To meet the High Commissioner's aspirations for IM, the strategy contains seven priority objectives.

Another important factor that characterizes UNHCR's IM approach and strategy is that it brings together internal and external information sources and systems in a logical,

manageable and coherent way. Linkages and support to needs assessment and monitoring work by the Inter-Agency Standing Committee (IASC), cluster-specific systems in

⁶⁸ Available at <http://www.gbvims.org>

⁶⁹ Available at <http://his.unhcr.org>

The seven priority objectives for IM

1. UNHCR's mandated leadership role in refugee situations is reinforced by predictable IM activities which are designed to serve all partners.
2. UNHCR delivers on its IM responsibilities in global and field clusters as they are defined by a lead cluster role and expected by the humanitarian community.
3. UNHCR systematically deploys skilled and respected IM personnel and resources to its field operations, starting in refugee emergencies through to solutions.
4. UNHCR's humanitarian population data management skills are maintained and strengthened.
5. UNHCR develops and disseminates credible protection monitoring systems, providing quality and actionable information.
6. UNHCR's needs assessment practices are institutionalized and further professionalized with particular regard to advice on assessment methods, and on participation in and coordination of joint and harmonized needs assessments.
7. UNHCR's IM activities are based on established standards and procedures for operational data collection, management and distribution. ●

the Protection, Emergency Shelter and Camp Coordination and Camp Management (CCCM) clusters, and other important and well-functioning tools designed and utilized by specific field operations are included in the approach.

Historically, organizations have coveted information in the belief that this strategy empowered them over others. In today's inter-agency world, however, one way organisations demonstrate their leadership is by serving

as an information source for others. Advantages arising from comprehensive IM activities are clear and UNHCR is working to systematically include IM in its work with partners. Moreover, strong IM allows for better use of the substantial amount of quality data and information generated and improves efficiencies in handling data which cuts costs and turn-around times for products. By continuing to strengthen IM in UNHCR, direct benefits will not only be experienced

by the organization and its partners, but most importantly by refugees and other populations of concern.

The following sections briefly describe the information management activities and challenges faced by UNHCR and partners during the recent emergencies in Ethiopia and Côte d'Ivoire. It concludes with lessons learned from these situations as well other emergencies and provides an insight into the future of UNHCR's Information Management strategy.

The Role of Information Management in Supporting the Public Health Response in Ethiopia

BACKGROUND

In 2011, Somalia was at the heart of one of the worst humanitarian crises in the world. Twenty years of conflict and waves of drought uprooted a quarter of the country's estimated 7.5 million people. In the beginning of September 2011, famine⁷¹ was declared in six regions of Somalia, and programmes in Kenya and Ethiopia were initially over-

whelmed. In response to the massive influx of refugees, where both malnutrition and mortality were rampant, UNHCR and partners scaled up operations to provide sufficient food, health care and treatment to the malnourished. A widespread measles outbreak occurred in both Ethiopia and Kenya which increased mortality amongst new arrivals. In view of the prevailing humanitarian crisis, UNHCR deployed innovative Information Management tools alongside traditional field-based epidemiological methods to guide decision-making and inform effective and timely interventions, including the measurement of mortality and malnutrition, outbreak monitoring and health response coordination.

MORTALITY

Mortality is one of the most important indicators for measuring the severity of a refugee crisis and is used to determine the threshold above which an emergency should be declared. However, the accurate measurement of mortality in an emergency can be extremely challenging. While recording deaths in health centres is the easiest

method for measuring mortality, community-based deaths are generally excluded from these figures.

A solution is to establish community-based reporting systems, strengthen community networks and employ trained community-health workers to systematically report any deaths that occur in households that fall under their responsibility. However, establishing such mechanisms is a difficult and time consuming task, requiring training and careful management of community health workers. This was considered impossible during the initial stages of the Dollo Ado emergency in Ethiopia due to the lack of trained health staff. Therefore, alternative methods for measuring mortality were required, and a traditional epidemiological technique of estimating crude and under five mortality levels using weekly grave counts was implemented in two newly established camps (see photo on page 55). Although grave counts are a relatively basic method of estimating crude mortality rates and have a number of limitations, they were deemed to be the most reliable method for assessing the crisis at the beginning.



What is Information/Data Management in UNHCR?

Information/Data Management is the capture, handling, storage, analysis and dissemination of data pertaining specifically to operations and the populations of concern, including demographic and statistical information.

It involves information on needs and conditions, geo-referenced information, and information related to protection and sector-specific concerns related to needs, delivery and impact in health, nutrition, water/sanitation, core relief items, shelter and education⁷⁰.

⁷⁰ To facilitate reading, only the term IM will be used in this chapter, but it includes here also the concept of Data Management. Information is based on data, and managing data is an essential prerequisite to managing information. For example, figures contained in an Excel table would be considered 'data', while a map could be considered as "information".

⁷¹ Famine is declared when acute malnutrition rates among children exceed 30 per cent, more than two people per every 10,000 die per day, and people are not able to access food and other basic necessities.



Grave site in Kobe refugee camp, Ethiopia

THIS METHOD was not implemented without challenges, however. In order to support the accuracy of data collected, traditional grave counting was combined with GPS⁷² technology to map the coordinates of each graveyard. By plotting all of the gravesites on a map, it was possible to ensure that investigators could return to the same sites each week to update grave counts (see *Figure VI.1*). Although data was collected using simple paper-based reporting forms, the final indicators were entered into the web-based Health Information System. Results were automatically published in Camp Factsheets and shared with partners.

Fig. VI.1

GPS locations of grave sites | in Kobe camp, Ethiopia



72 Global Positioning System



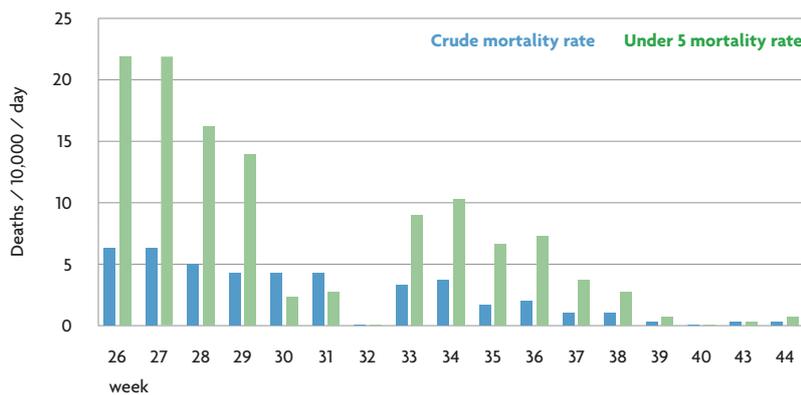
A health center funded by UNHCR in Kebribeyah refugee camp, Ethiopia. A lab technician is giving a Somali refugee a blood test.

At the start of the emergency, crude mortality rates as high as 5 deaths per 10,000 per day were recorded.⁷³ Through consistent, reliable

data collection and effective Information Management it was possible to monitor this trend over the duration of the emergency. Within two to

three months, mortality rates were reduced to below emergency thresholds due to targeted interventions (see Figure VI.2).

Fig. VI.2 **Trend of mortality rates for Kobe camp, in Ethiopia | 2011**



MALNUTRITION

Alongside mortality, acute malnutrition rates are an important indicator used to measure the severity of a refugee crisis. Acute malnutrition levels of 33 per cent were registered in the Ethiopian refugee camps of Melkadida and Bokolmayo in March and April 2011. In Somalia, populations fled as the food security situation was in rapid decline, exacerbated by increased violence and conflict within the country.

UNHCR and its partners used traditional methods to rapidly screen

⁷³ The emergency threshold is 1 death per 10,000 populations per day.

children under five years of age upon arrival, and periodically within camps, to measure the malnutrition status. This information allowed decision-makers to monitor the trends in malnutrition status over time, and also permitted individual children who were detected as being malnourished to be referred for appropriate care and treatment.

At a population level, UNHCR and its partners used community health workers to support a mass nutritional screening of all children under five. This screening coincided with mass measles and polio vaccinations to ensure widespread coverage. After electronically collecting the screening data, the final rates were entered into a web-application so the results could be compared with other routine nutrition indicators collected from selective feeding programmes. Integrating data from different sources permitted decision-makers to assess whether high malnutrition was reflected in health centre admission rates, in order to adapt the programmes accordingly. This use of Information Management was the first time UNHCR was able to provide a rapid, comprehensive view of the public health and nutrition needs of a population during an emergency and to monitor the strength of the response.

MONITORING DISEASE OUTBREAKS

In August 2011, a large measles outbreak was declared in Kobe refugee camp, Ethiopia and soon spread to other camps in the Dollo Ado area. During an active outbreak such as the one witnessed in Ethiopia, it is essential that information on the number of cases and deaths is captured in a timely manner on a daily basis. The data must also be rapidly shared with all partners in order to enable careful outbreak monitoring, and for targeted interventions. Innovative approaches to Information Management in public health were used in the collection and management of disease outbreak data.

This information needed to be rapidly consolidated and disseminated to partners involved in the response,

including a number of health agencies and other sectors such as health, nutrition, water/sanitation, education and camp management. To support this, UNHCR adapted its online Health Information System (webHIS) to permit daily outbreak data entry in each camp. Once entered, a consolidated report could be printed and shared with all partners to facilitate coordination and prompt action.

COORDINATING THE RESPONSE

During the Dollo Ado emergency, online data entry was combined with data visualization and publication of informational products to support the public health response. The webHIS application was deployed as a system

INFORMATION MANAGEMENT CAN BE USED TO STRENGTHEN UNHCR'S CAPACITY TO PROVIDE A TIMELY, AGILE AND FLEXIBLE RESPONSE TO LEAD AND COORDINATE INTERNATIONAL ACTION

that could be accessed by UNHCR and partners at field, regional and headquarters level, to access the most current emergency-related statistics.

The publication of regular Emergency Camp Profiles in Dollo Ado⁷⁴ was an important coordination tool. These camp profiles summarized key indicators across the sectors of public health, nutrition, HIV/AIDS, and water/sanitation, and could be rapidly generated, printed, and shared for coordination meetings. A review system was established within the webHIS to ensure data quality prior to publication on the UNHCR Operational Data Portal⁷⁵ for dissemination to other sectors and the expanded humanitarian community.

The role of information management in supporting the public health response to the refugee emergency in Ethiopia is a good example of how information management can be used to strengthen UNHCR's capacity to provide a timely, agile and flexible response to lead and coordinate international action for the protection of populations of concern.

⁷⁴ See <https://docs.google.com/viewer?url=http://his.unhcr.org/filestore/reports-his/2012/ET/Kobe201209.pdf&embedded=true>

⁷⁵ See <http://data.unhcr.org/horn-of-africa/country.php?id=65>

B. The Role of Information Management in Supporting the Emergency Response in Côte d'Ivoire

BACKGROUND

Since 2002, conflict within Côte d'Ivoire has driven internal displacements. Starting late 2010, a new wave of displacement resulted from the political standoff following elections. An estimated one million people were driven from their homes, and forced to seek security and safety elsewhere in the country.

Over the years, the United Nations and its partners have undertaken data collection activities to understand the scale and effects of displacement. Studies estimating the total number and location of displaced populations were conducted by a number of agencies, including UNHCR, the Danish Refugee

Council, and Tufts University.⁷⁶

Four months of post-election disruption, an estimated 200,000 people remained displaced in western Côte d'Ivoire. While the security situation in Abidjan and surrounding areas stabilized, at the western border with Liberia tension and security incidents continued. Historical land issues between communities were exacerbated by the presence of armed forces supporting the two presidents and resulting violence.

The situation was characterized as follows: despite perceived insecurity and lack of basic conditions, thousands of IDPs returned to their

villages and were in desperate need of protection and assistance. A substantial number of IDPs and returned refugees sought integration or settlement elsewhere in the country, particularly in Abidjan. The start of the annual agricultural season triggered spontaneous returns as many farmers went back to prepare fields. The potential for further inter-communal violence kept some specific groups from returning to their home. The vast majority of IDPs were hosted with individual families, with only a small proportion seeking shelter in camps and collective centres.

INFORMATION MANAGEMENT – ACTIVITIES AND CHALLENGES

The role of information management in supporting the emergency response in Côte d'Ivoire was crucial given the complex nature of the situation and the rapidly changing population displacement patterns. The IM activities largely revolved around obtaining accurate population figures, establishing a proper geographic referential data system, harmonization of data collection processes, and ensuring the dissemination of data.

As leader of the Protection and Shelter Clusters, UNHCR needed to provide information on violations against people and/or their property at a given location. Collecting protection data proved challenging due to its sensitive nature and the insecurity in many field locations.

In order to produce sound geographic analysis, communes, towns and locality levels had to be distinguished. In Côte d'Ivoire, initial population reports were misinterpreted

due to incorrect figure aggregation and confusion between administrative levels when locations could not be accurately identified on a map. To help solve this problem, UNHCR established a proper geographic referential system. In the absence of data on official boundaries, a set of files were created and shared in the Common Operational Dataset (COD) platform from the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). UNHCR also mapped the location of Liberian refugees in Côte d'Ivoire as well as the location of origin of Ivorian refugees residing in Liberia.

Another challenge faced by UNHCR and partners in Côte d'Ivoire was obtaining accurate population figures. UNHCR and the World Food Programme (WFP) figures only reflected those that had approached UNHCR or one of its partners. As the populations approaching these two

organizations were rarely the same, the figures of the two agencies were rarely identical. Furthermore, WFP had household-level registration information while UNHCR relied on a network of field monitors to capture population estimates through local communities and/or implementing partners. As a result, data discrepancies were observed in 17 locations.

A common method for capturing population data was required. UNHCR hosted a working group with operational partners to resolve the discrepancies in figures and to consolidate statistics from all sources (UNHCR, WFP, FAO, and UNFPA) into one overall figure. UNHCR also encouraged inter-agency collaboration on data collection and reporting process issues, including the need to share forms, tools, standard operating procedures and training. This reinforced collaboration with other agencies and non-governmental organiza-

⁷⁶ See [http://www.internal-displacement.org/8025708F004CE90B/\(httpDocuments\)/149F32C64848DBE4C1257173004740DF/\\$file/ENSEA+IDP+study+Mar06.pdf](http://www.internal-displacement.org/8025708F004CE90B/(httpDocuments)/149F32C64848DBE4C1257173004740DF/$file/ENSEA+IDP+study+Mar06.pdf) or [http://www.internal-displacement.org/8025708F004BE3B1/\(httpInfoFiles\)/CA8C06D26F6DBEE5C12574BA002995EB/\\$file/urban_displacement_abidjan_08.pdf](http://www.internal-displacement.org/8025708F004BE3B1/(httpInfoFiles)/CA8C06D26F6DBEE5C12574BA002995EB/$file/urban_displacement_abidjan_08.pdf)

tions on improved information sharing between managers and monitors.

Collaborative training ensured harmonized reporting formats for use with IDPs in the southeast of the country, including harmonized counting forms and evaluations of people with specific needs and protection issues in Abidjan. Local information management staff were identified and trained to ensure a proper handover to the emergency support team. Efforts resulted in a sustainable revision of population figures and characteristics with a commonly agreed upon format at the country level.

DATA DISSEMINATION

The dissemination of humanitarian information has traditionally been organized around the production and exchange of static documents, efficient for the publication of situation reports, sectoral assessments or specific analysis but limiting the exchange and dissemination of data. Successful data dissemination requires accessible and visually meaningful formats that allow partners to do planning based on authoritative figures. Storing data and relevant documents in a centralized location in Côte d'Ivoire proved important to the information coordination between clusters and sectors.

In emergency refugee operations, UNHCR tends to use its Operational Data Portal⁷⁷ to share information with its partners and other stakeholders. In Côte d'Ivoire, however, UNHCR formed an Information Management working group in collaboration with OCHA to configure and present the One-Response platform⁷⁸ for disseminating and organizing reports and publishing key documents on ReliefWeb⁷⁹.

A refugee from Côte d'Ivoire is being registered by UNHCR at the Bahn refugee camp in Liberia. Liberia received an estimated 200,000 Ivorian refugees in the course of 2011.

UNHCR / G. GORDON



⁷⁷ <http://www.unhcr.org/pages/49c3646c4d6.html>

⁷⁸ <http://ivorycoast.humanitarianresponse.info/>

⁷⁹ <http://reliefweb.int/country/civ>

Conclusion

In order to uphold its mandate to protect and assist refugees and other persons of concern, UNHCR has collected and maintained relevant information for decades. As the needs for data have evolved, so too have the tools for its collection and the communication channels through which the information is disseminated. In response to these changes, UNHCR has prioritized information management activities outlined in its Information and Data Management Strategy 2012–2014. Lessons learned through recent humanitarian emergencies and refugee situations have enabled the organization to create innovative solutions to identified information management gaps and challenges. Enhancing organizational and operational information management capacity allows for increased information sharing among partners and ultimately improves services for refugees and other populations of concern.

Though information is understood to be vital in mobilizing resources and achieving protection results, information overload can overwhelm operational managers and contribute to poor communication. UNHCR's IM approach focuses on generating better quality information in a predictable way.

The importance of good Information Management was clearly evident in 2011 during the emergencies in North, West and the Horn of Africa. Thanks to the IM capacity in these operations, UNHCR proved its ability to provide partners with quality data; collecting it from a wide range of providers (including governmental sources, implementing and operational partners, and donors), validating and updating it through a process of consultative verification, and disseminating it in a user-friendly, predictable, participative and immediate manner.

The success of these efforts is based on several key factors: speed (timeliness), expertise, standard approaches

and tools, and a receptive management environment. The UNHCR Information and Data Management Strategy is being implemented with the aim to standardize these experiences across the organization as a whole, including the creation of IM Officer positions in the field.

The products generated by IM experts is information which can be readily shared and utilized by partners in the field. These products, such as camp profiles, maps, statistical information, “who does what where” (3Ws) information, also help facilitate understanding of complex operational realities and serve as tools for public information and resource mobilization. Support from IM experts was also crucial to ensuring platforms for sharing relevant inter-agency information, coordinating inter-sectoral IM activities and facilitating inter-agency agreement on the interpretation of statistical data.

These activities enhanced UNHCR's emergency response capacity as they not only facilitated and improved coordination among several actors, they also allowed the organization to make evidence-based decisions, avoid duplication, ensure better targeting, and make effective use of partners' resources by identifying gaps. UNHCR was then able to dedicate its own resources to priority or under-funded areas. Moreover, this IM approach contributed to resource mobilization, as donors found it easy to understand the complexity of needs in the many locations.

Strengthened IM is required across all UNHCR operations, including more stable and protracted operations, to promote improved needs analysis and appropriate responses with partners. Even in offices where UNHCR has a less direct operational role, IM is important in ensuring decision-makers have access to the data they require in order to advocate for appropriate funding and support for populations of concern. ■