

## Agenda for Humanity Newsletter Progress Update (January - December 2018)

### I. Executive Summary

This progress report covers the activities of the OCHA Centre for Humanitarian Data during the period 1 January 2018 through 31 December 2018. This 12-month period followed the public launch of the Centre by the UN Secretary-General in December 2017. Our focus was on extending the value of OCHA's data sharing platform, the Humanitarian Data Exchange (HDX), increasing adoption of data standards, and establishing and making progress with the new workstreams for data policy, data literacy and network engagement.

Significant achievements during the reporting period included:

- The number of unique users of HDX increased by 69%, from 21,802 a month to 36,828 a month.
- The number of overall datasets on HDX grew over the year by 38% to 8,176 datasets provided by over 200 organizations.
- A pilot project saw five organizations work on using IATI to automatically share funding data with OCHA's Financial Tracking Service.
- An initial draft of the OCHA Data Responsibility Guidelines was shared with internal and external review groups for feedback.
- The initial class of 2018 Data Fellows produced tangible results including through a widely-viewed data story on displacement in South Sudan and a model to predict pooled-fund requirements to de-escalate food insecurity in Somalia.
- A new workstream on predictive analytics was initiated based on direction from OCHA's USG.

### II. Achievements Highlights

The mission of the Centre is to work with partners to increase the use and impact of data in humanitarian response. The vision is to create a future where all people involved in a humanitarian situation have access to the data they need, when and how they need it, to make responsible and informed decisions.

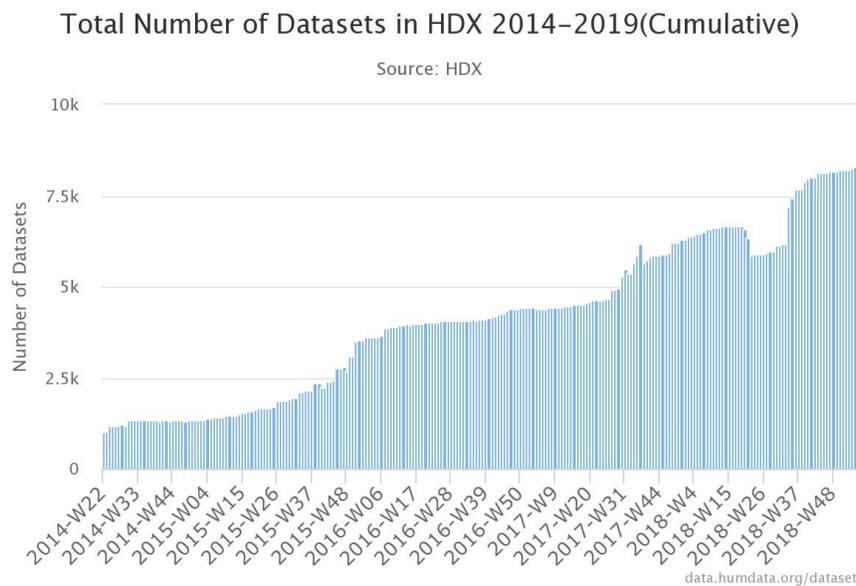
The Centre is focused on four objectives which are related to the four workstreams, including:

- Increase the interoperability of humanitarian data through shared standards and integrated systems (data services)
- Increase the trust and cooperation across organizations sharing data in humanitarian response (data policy)
- Increase the capability of people to access and use data in support of humanitarian efforts (data literacy)
- Increase the number of active partners engaged with the Centre (network engagement)

#### A. Data Services

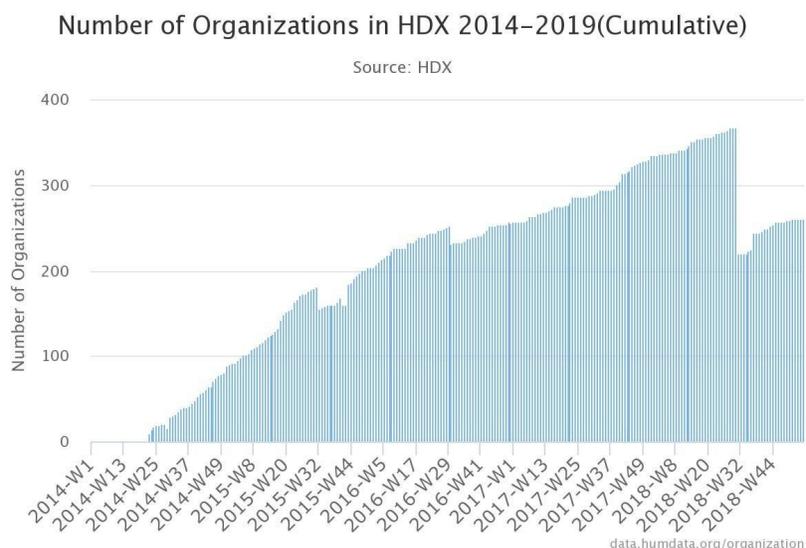
The Centre's data services work includes management of HDX and increasing the use of data standards, including HXL and IATI. Over the reporting period, the HDX platform saw tremendous growth: the number of unique users increased by 69%, from 21,802 to 36,828 per month; the monthly number of datasets downloaded increased by 114%, from 59,699 in November 2017 to 127,968 in November 2018, and the overall number of datasets grew by 38%, to 8,221 datasets uploaded (see Figure 1).

**Figure 1: Cumulative growth in HDX datasets:**



Sixty organizations joined the platform in 2018, bringing the total number of organizations on HDX to over 200 (see Figure 2). Together, all organizations added 1,940 new datasets. Some 25 of these 200 organizations are sharing data programmatically, meaning that updates to the data happen automatically without manual intervention by a data manager. UNHCR, UNOSAT and Humanitarian OpenStreetMap Team continue to be the most active organizations on the platform with 1,922, 722 and 694 datasets respectively.

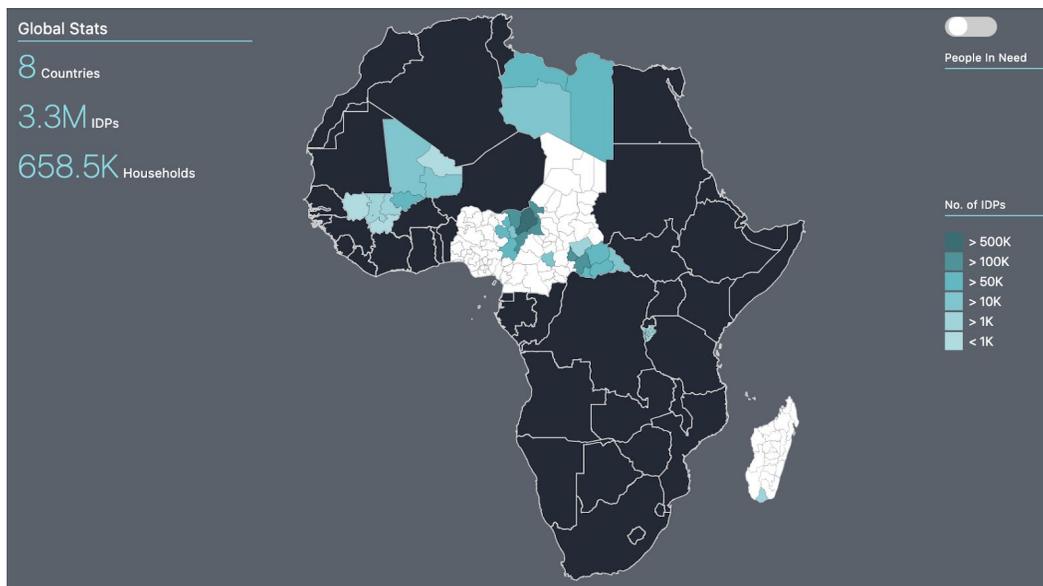
**Figure 2: Cumulative growth in HDX members:**



HDX also powered a number of interactive data visualizations that were integrated with other OCHA properties including unocha.org, Reliefweb, and Humanitarian InSight. Data shared through HDX was used to create custom visuals about crises around the world, including [conflict-induced displacement in Afghanistan](#), [attacks on education in crises](#), the Ebola outbreak in DRC, and [cash distribution in Somalia](#).

In 2018, the Humanitarian Exchange Language (HXL) the data standard was further enhanced through the development of tools to incentive users to standardize their data. These tools include: Quick Charts which enables users to create and share interactive charts and graphs; and Data Check which allows users to upload their data and get a report back highlighting potential errors. The most popular tool has been HXL Tag Assist which helps data managers learn more about the standard and how to apply to HXL tags to datasets.

As part of an agreement with the International Organization for Migration (IOM), work continued in 2018 on improving access to displacement data. Through support from a staff secondment to the Centre, IOM is making it easier for its field staff to share data through HDX and is increasing the interoperability of their displacement monitoring data by using HXL. See visual below of multiple DMT datasets combined with HXL tags.



In 2018 the Centre also initiated a pilot project to provide an automated way for organizations to publish information about their humanitarian funding and activities according to the International Aid Transparency Initiative (IATI) standard in OCHA's Financial Tracking Service (FTS). Since many organizations already publish data on development spending via IATI, use of the standard for humanitarian spending will reduce duplicate reporting and create internal efficiencies and cost savings. Participants for the pilot include the International Rescue Committee, the Netherlands Ministry of Foreign Affairs, OCHA's Country-based Pooled Funds, the UK Department for International Development, and the United States Agency for International Development.

The pilot includes the following components:

- Support to pilot partners to modify their existing financial and activity reporting systems (or creating new ones).
- Integrating the new reporting streams into FTS, and testing FTS's recently-developed IATI ingestion module.
- Developing technical guidelines for reporting humanitarian funding to FTS using IATI.
- Training and outreach events, including an IATI-FTS technical meeting with partners.

## B. Data Policy

The Centre's data policy work is focused on developing a framework and guidelines for how OCHA manages data responsibly in humanitarian crises. The Centre also provides advice to OCHA staff and partners on data sharing agreements and data security.

During the reporting period, research was conducted to inform the drafting of the OCHA Data Responsibility Guidelines. The Guidelines will define the principles, processes and practices by which the organization handles data as the coordinator of humanitarian response. In turn, practical tools will be developed and shared to promote more consistent and responsible data practice within OCHA and the broader humanitarian community.

A template data sharing agreement for partners was also developed and we engaged with the UN High Commissioner for Refugees and the Danish Refugee Council on a framework for data sharing in practice. Research also continued to better understand how sensitive data is shared and used by OCHA staff and humanitarian partners in conflict environments. The research focuses on different types of risks and threats related to humanitarian data and how to mitigate potential harms to affected people and aid workers.

At the end of 2018, an agreement was reached for a two-year, EUR 500,000 project funded by the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) focused on the management of sensitive data and improving data responsibility. The project aims to ensure responsible data exchange by partners in the humanitarian sector. The Centre will address this challenge by establishing and promoting uptake of a secure

infrastructure, process, and service model for de-risking sensitive data about crisis-affected populations. The technical support will be reinforced with task-based guidance notes and community events and outreach

### **C. Data Literacy**

The Centre's data literacy work is focused on increasing the capability of humanitarians to access and use data in their daily work. The Centre's data literacy workstream involves developing a data literacy curriculum and delivering a number of training events.

During the reporting period, the Centre conducted frequent webinars on areas where we have specific subject matter expertise such as data policy, data visualization, predictive analytics, and how to use HDX and HXL. The Centre also co-lead three data skills workshops in Dakar, Nairobi and Doha, in partnership with the International Federation of Red Cross and Red Crescent Societies.

In June and July 2018, the Centre hosted the inaugural class of the Data Fellows in The Hague. The Data Fellows Programme is designed to expose our team and partners to new areas of data-related expertise that can impact humanitarian response and advance the goals of the Centre. In selecting the inaugural class of Fellows, we were looking for people with deep technical expertise and a passion for doing mission-driven work. This was no small task, as over 700 people applied for the programme.

The selected Fellows worked to develop solutions across four areas: Data Science, Data Storytelling, User Experience Research and Predictive Analytics.

- The Data Science Fellow focused on developing an approach and a technical tool to review education datasets and generate simple analytics to show what data is available and missing across crises and organisations.
- The Data Storytelling Fellow developed two data stories about the experience of internally displaced persons (IDPs), including the journey taken by a South Sudanese family to flee violence and find refuge.
- The User Experience Research Fellow worked to understand how users in different roles and locations experience the HDX platform.
- The Predictive Analytics Fellow explored how predictive analytics might inform humanitarian financing decisions, with a focus on Somalia.

In December 2018 the Centre began working with the private consultancy firm Dalberg to design a data literacy programme. The research continued into early 2019; the results will lead to a two-year roadmap for the programme. The Centre will begin offering new learning opportunities to priority audiences in mid 2019.

### **D. Network Engagement**

The Centre's work in network engagement involves building and engaging an active community of individuals and organizations working with humanitarian data. The Centre collaborated with dozens of humanitarian organizations and private sector partners through information sharing, implementation of shared projects, and staff secondments.

In September 2018, the Centre co-hosted a UN General Assembly side-event to explore partnerships with the private sector. The Deputy Head of OCHA, Ursula Mueller, led a discussion with representatives from Amazon, Microsoft, Safaricom and governments to understand how innovative approaches to data management can be applied to crisis response.

The Centre worked to increase access to data about education in emergencies through a partnership with the Education Above All Foundation. A workshop was held in New York in November to advance the use of education data with attendance by the SRSG for Children and Armed Conflict, Virginia Gamba.

To highlight the completion of the first year of operations, the Centre conducted a communications campaign in December 2018. Two blogs were published, 'Top 10 Highlights of 2018' and 'Four Takeaways from the Centre's First Year'. These blogs were complemented by a radio interview with UN News and public events in The Hague. The UN, OCHA and partner organizations supported the campaign by sharing the material through their websites and over social media. In total during the reporting period, 26 [blogs](#) were published about the work of the Centre.

### **E. Predictive Analytics**

Initiated as part of the inaugural class of the Data Fellows Programme in June 2018, the work on predictive analytics focused on demonstrating the value addition of predictive analytics to the humanitarian space. At the request of the OCHA leadership, the work on Predictive Analytics developed into an additional workstream for the Centre following a briefing in New York in October 2018.

The initial pilot explored the feasibility of predicting humanitarian finance requirements from the Somalia Country-Based Pooled Fund (CBPF) and Central Emergency Response Fund (CERF) in locations of severe food insecurity in Somalia. The pilot location and topic were selected in order to dovetail with the World Bank's Famine Action Mechanism (FAM), which was under development in 2018 in five countries including Somalia. FAM aims to predict the distribution of Integrated Food Security Phase Classification (IPC) phases in a given sub-national geographic area. Apart from the Somalia famine model, work was also initiated to develop a climate-driven model for southern Africa around El Niño-affected.

### **IV. Challenges**

The Centre's business plan originally included four workstreams. Given the head of OCHA's interest in predictive analytics and anticipatory approaches, we started a new area of work on predictive analytics. This presented a challenge to existing capacity and a constraint on resources. The Centre was able to maintain good progress on the existing targets across all workstreams and incorporate the predictive analytics work during the reporting period with the support of a Fellow and additional capacity loaned by the OCHA Regional Office for Southern and Eastern Africa. Going forward, as the predictive analytics work develops into a full workstream, additional resources and capacity will need to be mobilized from new partners and funders.

### **V. Conclusion and recommendations**

Over the reporting period, the Centre saw significant progress with the data services and network engagement workstreams and slower progress with the data policy and data literacy workstreams. The business model of a geographically distributed team and implementation support from UNOPS worked exceptionally well. Our global footprint allows us to expand our reach, stay field focused, and build trusted relationships in the places where our partners are located.

In 2019, the Centre's priorities will include rolling out a 'crisis data grid' for specific countries on HDX, which will help users to know what core data is available and missing across priority humanitarian crises. The Working Draft of the OCHA Data Responsibility Guidelines will be released to help staff navigate the technical and ethical aspects of working with sensitive data. In collaboration with the OCHA Humanitarian Financing and Resource Mobilization Division and through continued engagement with the World Bank FAM, the Centre's work on predictive analytics will be further consolidated in support of anticipatory financing. A roadmap for the data literacy workstream will be initiated with a two-track focus on teaching data basics and more advanced data skills to OCHA staff.

Having concluded its second year of operations and going into its third, the Centre's current financial resources do not match the ambitions of its business plan and scope of work. At the

writing of this report, the Centre is seeking to raise additional funds to cover our third-year costs. We have also prepared a proposal for our predictive analytics work to further accelerate this workstream amidst growing demand from OCHA leadership and partners.