Interim Progress Report #2
OCHA Centre for Humanitarian Data
Submitted to the Ministry of Foreign Affairs of the Kingdom of the Netherlands

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Interim report period: 1 January 2021 – 30 June 2021

I. Overview

This narrative report covers the activities of the OCHA Centre for Humanitarian Data during the period 1 January through 30 June 2021. This 6-month period marks the end of Year 1 of our Phase 2 operations (2020 - 2023).

Significant achievements during the reporting period included:

- Released the second edition of *The State of Open Humanitarian Data* report.
- Revised the Peer Review Framework for Predictive Analytics and assessed the Digital Impact Alliance (DIAL) model.
- Supported the independent impact evaluation for the Bangladesh flooding anticipatory action pilot.
- Modeled the secondary impacts of COVID-19 on other infectious diseases in Somalia.
- Supported the endorsement of *Operational Guidance on Data Responsibility in Humanitarian Action* by the IASC.
- Released the HDX Data Visualization Guidelines.
- Developed an IATI COVID-19 Funding Dashboard, based on a project with USAID.
- Trained 53 OCHA staff by supporting the French and English sessions of the OCHA Information Management Preparedness and Coordination Training (IMPACT).

During the reporting period no additional funds were raised but we were in the final stages of signing a two-year agreement with Switzerland focused on data responsibility and a one-year agreement with USAID on addressing data gaps. We continue discussions with Google.org on a two-year project covering our support to OCHA's anticipatory action agenda.

Details on the substantive work of the Centre are provided below.

II. Objectives and Key Results

The mission of the Centre remains to increase the use and impact of data in humanitarian response. Our vision is to create a future where all people involved in a humanitarian crisis have access to the data they need, when and how they need it, to make responsible and informed decisions. The Centre's operations are organized around four workstreams[1]: data services, data responsibility, data literacy, and predictive analytics. Together, the workstreams contribute to the Centre's four objectives:

1. Increase the availability of data for humanitarian response.
2. Increase the trust and cooperation across organizations sharing humanitarian data.
3. Increase the capability of people to work with humanitarian data.
4. Increase the use of predictive models for anticipatory action.

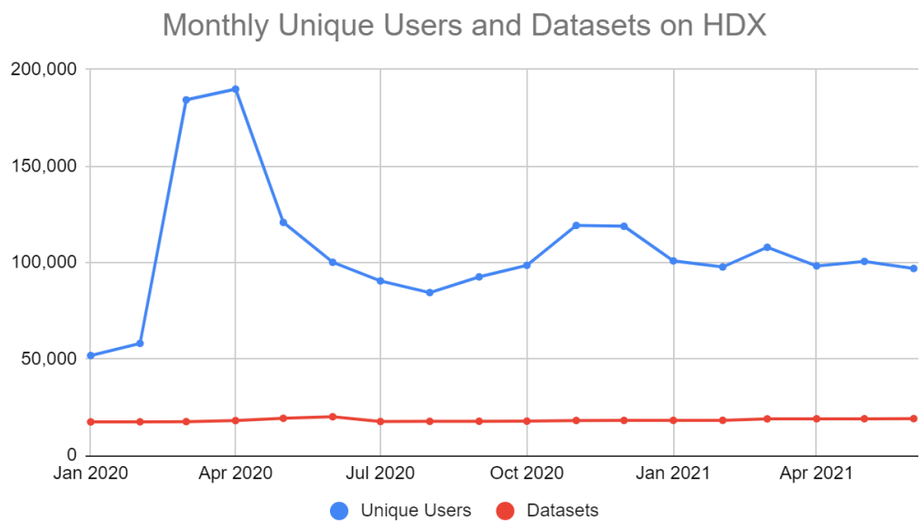
These workstreams are supported by a number of enabling functions such as management, partnerships, and communication; our field personnel in Nairobi, Dakar, and Jakarta; and our Data Fellows Programme.

[1] The initial business plan included a workstream for network engagement which has been subsumed under enabling functions. We have renamed the workstream for data policy to data responsibility in order to better express our focus. Our predictive analytics work, which began in September 2019, is now officially a workstream.

A. Data Services

The Humanitarian Data Exchange

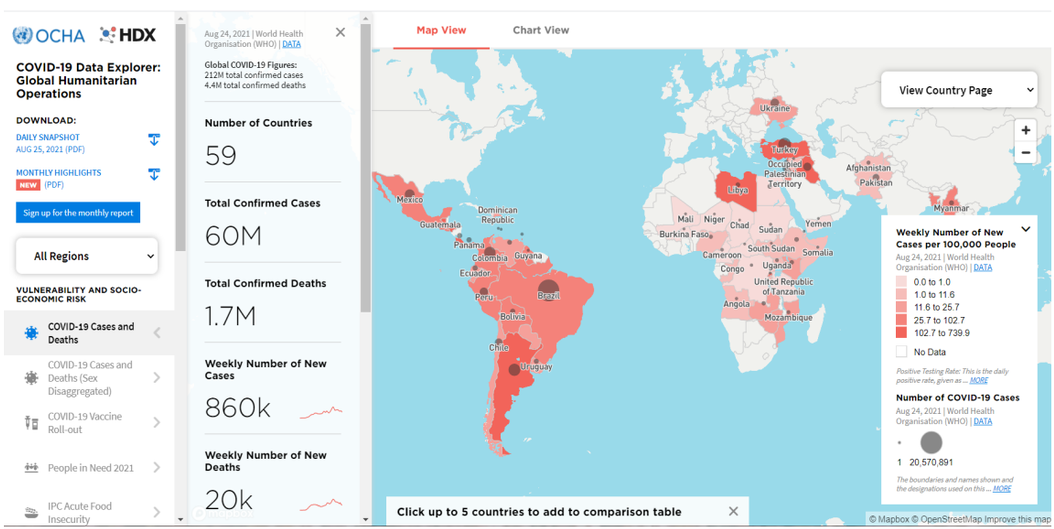
The Centre's data services work includes management of HDX and increasing the use of data standards, including HXL and IATI. Over the six-month reporting period, the average number of unique users per month decreased slightly, from 100,696 to 100,384; and the total number of datasets downloaded also decreased by about 9%, from 883,416 (July – December 2020) to 802,492 (January - June 2021). The drop in users and downloads is not surprising since we are still coming off the record-breaking COVID-19 spike we experienced in early 2020 (see chart below).



The number of datasets decreased about 5% from 18,206 at the end of December 2020 to 19,128 at the end of June 2021. This is mainly due to regular maintenance carried out by the HDX team and the beginning of an archiving programme that will see the removal of delinquent datasets that have not been updated for many years.

Ten new organizations joined the platform in the first half of 2021, bringing the total number of organizations on HDX to 352 by the end of June. Together, all organizations added 922 new datasets for the period. Humanitarian OpenStreetMap Team (HOT), UNHCR, and WorldPop are the most active organizations on the platform with, 3787, 2025, and 1874 datasets added respectively.

Data shared through HDX was used to maintain the OCHA COVID-19 Data Explorer. The Explorer, which brings together data related to underlying vulnerability and socio-economic risk as well as the level of humanitarian and international financing going towards the COVID-19 response, now includes over 60 datasets covering 59 countries. OCHA and the Centre also issue a monthly analysis report on COVID-19 in Global Humanitarian Overview countries based on the data in HDX.



In February, we released the second edition of *The State of Open Humanitarian Data 2021*. The report uses HDX as a proxy for measuring data activity and availability on a global scale. This is done through the Data Grids, which bring together a limited set of foundational datasets within six comparable categories. As of January 2021, we estimated that 50% percent of relevant, complete crisis data is available across 27 humanitarian operations with Humanitarian Response Plans.

The International Aid Transparency Initiative (IATI)
Throughout the first half of the year, the Centre has provided internal support to other parts of OCHA (especially the OCHA-managed pooled funds) to improve the quality of the OCHA's IATI reporting. Over the past year and a half, the Centre's support has helped OCHA improve the comprehensiveness and value-added dimensions of its IATI publication, and will continue to work on enhancing these in the run-up to the next release of the biennial *Aid Transparency Index* from Publish What You Fund, in March 2022.

In partnership with USAID, we also took over a prototype COVID-19 Funding Dashboard from Development Initiatives and during the first half of 2021 we improved the user experience and focused on COVID-19 IATI data exclusively (the earlier iteration had used FTS data for project funding). In addition to the dashboard itself (which can be found here https://data.humdata.org/viz-iati-c19-dashboard/) the project has had three significant outcomes for IATI:

- We developed new algorithms for producing deduplicated aggregate funding totals from IATI data for countries, sectors, or organisations and circulated those with the IATI community.
- We engaged directly with external IATI publishers[2] to help them improve the quality of their IATI data, especially around COVID-19.
- We developed new recommendations for IATI reporting around global crises like the COVID-19 pandemic, and will be engaging with the IATI community to formalise them, starting with a launch event in September.
- Building on the learning and developments from this project, we will also be able to further advise and support the OCHA Financial Tracking Service (FTS) with its ingestion of IATI data.

B. Data Responsibility
The Centre's data responsibility work is focused on providing field support and developing guidance for how OCHA manages data responsibly in humanitarian crises. The management of sensitive data on HDX continues to be improved through a rigorous quality assurance process for datasets uploaded to HDX as well as the application of an algorithm that predicts the likelihood that a dataset may contain sensitive data. The Centre also organized a joint training session with one of its collaborators, REACH, to foster better understanding of data sensitivity and related best practices.

The finalized *Operational Guidance on Data Responsibility in Humanitarian Action,* which was developed through an inclusive and consultative process that the Centre co-led with IOM and UNHCR, was formally endorsed in February 2021. Following this endorsement, the Centre and the co-leads conducted a number of briefings to a range of stakeholders to help disseminate the Operational Guidance. Together with the Co-Leads, the Centre also initiated the *Data Responsibility Working Group (DRWG)* to coordinate and monitor progress on the implementation of data responsibility in humanitarian action.

The Centre is in the process of revising the Working Draft of the OCHA Data Responsibility Guidelines, released in March 2019. This revision is based on the experiences with the working draft in over ten response contexts and new global guidance related to data responsibility. The Centre has also been conducting field consultations with OCHA field colleagues to receive

[2] USAID; World Health Organization; UNHCR; World Vision International; Danish Refugee Council; Oxfam Novib

feedback on the revisions to the Guidelines. The Guidelines are currently being finalized and will be endorsed before the end of the year.

During the reporting period, the data responsibility team continued to support field colleagues with the adoption of data responsibility guidance. This support included the adoption of two regional information sharing protocols in Cameroon, a completed data responsibility diagnostic and a draft information sharing protocol for the IDP Working Group in Somalia, an updated information sharing protocol for Niger, and Guidance for Responsible Data Management Guidance to support the responsible management of data in the Multi-Sector Needs Assessment (MSNA) in Syria.

C. Data Literacy

The Centre's data literacy workstream involves developing a data literacy curriculum, learning resources and delivering training events. With in-person training still on hold due to the COVID-19 pandemic, online learning has remained the focus.

Following the success of the Quick Tips for Visualisations Data, which continue to be accessed by one to two hundred people every month, we created the HDX Data Visualisation Guidelines to provide users with an overview of basic design principles and provide advice and best practices for visualization humanitarian data. The Guidelines have been accessed by over 1,000 people since their launch in April 2021. To promote the guidelines and reach new audiences, we created a series of short videos (30 secs to 1 min), highlighting different components of the Guidelines.

We are updating the statistical disclosure control learning path based on user feedback. The changes are intended to make it more obvious to users how they should move between the different sections of the learning path. The Humanitarian Exchange Language and Introduction to Mapping learning paths will be published once the new templates and improvements are ready, with publication dates planned for in the final quarter of 2021.

Finally, we designed and delivered a number of sessions for OCHA's Information Management Preparedness and Coordination Training (IMPACT). IMPACT took place over 3 months and was delivered in French (28 participants) and English (25 participants). A third Spanish programme is starting in September 2021. The Centre contributed sessions on Statistical Disclosure Control, Data Responsibility, Information Sharing Protocols, HDX and the Data Grids, Sex and Age Disaggregated and Disability Data and the Humanitarian Exchange Language.

D. Predictive Analytics

The Centre's predictive analytics workstream focuses on model development and quality assurance of partner models through validation and a peer review process. During the reporting period, the Centre's *Peer Review Framework for Predictive Analytics* was revised and used to assess the Malawi Mobile Network Operator model developed by the Digital Impact Alliance

(DIAL) with their technical partners Cooper/Smith and Infosys. The model aims to help inform the placement of health facilities.

Building on the OCHA-Bucky COVID-19 predictive model, we continued our partnership with Johns Hopkins University Applied Physics Laboratory to model the secondary impacts of COVID-19 and its mitigation strategies on the prevalence of and capacity to treat other infectious diseases, such as measles, malaria, cholera to support planning across humanitarian operations with a specific focus on Somalia. The initial model was developed based on demand from the WHO Somalia country office.

We also provided scenario planning and COVID-19 modeling support for a number of response contexts. This included reports, as requested, for OCHA offices on projections of COVID-19 cases, deaths and hospitalizations using the OCHA-Bucky model.

Related to anticipatory action, we validated models and triggers for dry spells in Malawi, typhoons in the Philippines, and flooding in Nepal. In addition to model and forecast analysis, we also contributed to the impact evaluation for the 2020 Bangladesh monsoon flooding pilot. The goal of this work was to provide evidence on the additional benefits of anticipatory humanitarian actions as compared to traditional flood response. The analysis combined survey data collected shortly after the disaster with satellite imagery based estimation of flood timing and severity.

E. Enabling Functions: Partnerships and Communications

The Centre collaborates with dozens of humanitarian organizations and private sector partners through information sharing, implementation of joint projects, and staff secondments. During the reporting period we continued to grow the Centre's network of partners, from those sharing data through HDX to those developing predictive models.

In terms of events, we co-organized an ECOSOC side-event with the International Rescue Committee and the International Organization for Migration on Improving and Safeguarding the Humanitarian Data Ecosystem. The event discussed the opportunities and challenges in improving the global humanitarian data sharing ecosystem, while sharing practical solutions and recommendations for the future of data in the humanitarian space. We also organized a webinar in June 2021 entitled: Complex Systems Modelling: An opportunity to Better Understand and Anticipate Humanitarian Needs?, which the Centre and colleagues from academia, NGOs and the United Nations shared experiences and provided concrete examples of how complex systems modeling can inform policy-making and response planning in different contexts such as disaster risk reduction or drought-induced displacement. And we joined an event co-hosted by OCHA and the Netherlands in April 2021 on Technology and Humanitarian Action: From Digital Promise to Frontline Practice.

We published four blogs and one impact story about the work of the Centre. Highlights include:

- IASC Operational Guidance On Data Responsibility In Humanitarian Action
- The State of Open Humanitarian Data 2021
- HDX Year in Review in 2020
- Call For Reviewers - Predictive Analytics In Humanitarian Response
- Impact Story: Predicting Drought-Related Food Insecurity In Ethiopia

III. Centre Results Framework

The Centre's Results Framework for the 2020-2023 Business Plan includes four objectives and eight results. The table below includes the baseline measurements and the results achieved from 1 January through 30 June 2021, which concludes the first year of our 2020 - 2023 business plan.

	Baseline	Q1 2021	Q2 2021

Objective 1 (Data Services): Increase the availability of data for humanitarian response			
1(a). 25% increase in unique users on HDX annually	**63,672**	**106,631 (users per mo/3 mo average)**	**118,195**
	Target	75,611	79,590
1(b). Data grids 80% complete for all 2020 HRP locations by end of year three	**54%**	**49% (27 locations)**	**49% (27 locations)**
	Target	66%	70%
Objective 2 (Data Responsibility): Increase the trust and cooperation across organizations sharing humanitarian data			
2(a). Data responsibility guidance adopted by 80% of OCHA offices	**11.4%**	**12/35 = 34.29%. Introduced two new countries at 'Early Stage' level (Ukraine and Turkey); Ongoing support to Cameroon, Somalia, Yemen; initiated OCHA Data Responsibility Guidelines revision; IASC Operational Guidance endorsed.**	**12/35 = 34.29% (no new countries but progress on maturity); DRWG initiated; OCHA DR guidelines finalized for review;support to Cameroon, Iraq, Turkey, Somalia, Sudan, Ukraine)**
	Target	30%	40%
2(b). Prevent personal or sensitive data from being shared on HDX	**0**	**4 sensitive datasets (from REACH, GFMM) were assessed/screened. DLP work in progress.**	**5 sensitive datasets (FAO, OCHA Colombia, Inter Agency Coordination Platform for Refugees and Migrants from Venezuela, and Assistance Coordination Unit were assessed.**
	Target	0	0
Objective 3 (Data Literacy): Increase the capability of people to work with humanitarian data			
3(a). Data literacy training delivered to 200 people by the end of year three	**0**	**0 (no in-person training planned due to COVID-19)**	**53**
	Target	40	60
3(b). Data literacy capacity building material accessed by 6,000 people by the end of year three	**0**	**1,768 people accessed materials**	**3,345 people (cumulative) accessed materials**
	Target	1,500	2,000
Objective 4 (Predictive Analytics): Increase the use of predictive models for anticipatory action			
4(a). Twelve predictive models developed by partners are taken through the Centre's peer review process by the end of year three	**0**	**+1 (DIAL) = 2**	**+0 = 2**
	Target	2	3
4(b). Scenario planning and modeling support provided in 25 humanitarian contexts by the end of year three	**4**	**18/25 = 72% Q4 (+2): infectious disease modelling for WHO Somalia; Bangladesh AA impact evaluation**	**+2 total: 20/25=80% Q1 (+2): AA work on Nepal, the Philippines**
	Target	17.4%	21.7%

IV. Challenges

While we were able to adjust to developing online learning modules, there is no substitute for in-person training. Uncertainty remains around conducting a second Data Literacy Foundations

Programme as we did with OCHA staff in 2019. Similarly, travel restrictions have halted our ability to conduct field missions. Although we have maintained our field support across workstreams, lack of travel and in-person meetings makes it more difficult to provide the same type of support.

V. Conclusion

The Centre had a successful end to its fourth year of operations. We saw steady progress across all workstreams. In the next six months our priorities include:

- Continuing to maintain the HDX platform, with particular focus on closing data gaps. We will release a data story about the IATI COVID-19 Financing dashboard.
- We will finalize OCHA's Data Responsibility Guidelines. We will continue to work with partners to implement the endorsed *IASC Operational Guidance on Data Responsibility in Humanitarian Action*.
- We will develop online learning modules on the HXL standard, mapping, and data analysis.
- We will support OCHA offices with modeling and forecasts and provide technical support for the CERF anticipatory action frameworks.
- We will take more partner models through the Centre's Peer Review process.