



# Data for Children

Matching data challenges with practical solutions

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### MATCHING DATA CHALLENGES WITH PRACTICAL SOLUTIONS

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After decades of concerted advocacy and investment, key data gaps about the well-being of children and their families are narrowing. The world has more information than ever before about which children are thriving, which are being left behind, and where work is needed to reach the most vulnerable.

While data availability improves, new opportunities and challenges in using data for children loom on the horizon. Tackling them will require more agile approaches to prioritizing, resourcing, and doing data work.

The broadest of the new data frontiers covers efforts to expand data use. From shaping national education budgets to training staff in rural health clinics, data are already being used to drive results for children. Experience from around the world has made it abundantly clear that the right data in the right hands at the right time can create positive change. Getting those data where they belong when they are needed, however, requires a new way of thinking about data investments – one that is driven by the intended use of data.

UNICEF has begun this shift in its own data investments throughout the organization. At global, regional, and country levels, offices are thinking critically about how stronger data demand and better data use can help push change for children further and faster.

Beginning with the launch of the organization-wide [Data for Children Strategic Framework](#) in 2017, UNICEF has identified several areas where more focussed investments in data for action can

accelerate results. Core areas requiring heightened commitment include: expanding strategic planning of data work; strengthening administrative data systems; addressing the specific challenges of data in humanitarian contexts; and – cutting across all areas – raising the floor of data savvy for UNICEF staff across the world.

#### **A new team for new challenges: Data for Action**

Recognizing how essential these data investments are to delivering results for children, UNICEF has made an institutional commitment to them, creating a global Data for Action unit in 2018. The team brings together colleagues with broad skills in strategy, knowledge management, and partnerships with content specialists focussed on administrative and humanitarian data. Together, the team identifies the most common challenges that inhibit effective data use and develops timely, practical solutions to respond to those needs.

This brief, released two years on from the launch of the global Framework, outlines some of the work already underway in the Data for Action portfolio. The brief covers the potential that UNICEF sees in each area of work, the progress that has already been made in each topic, and the opportunities for future investment. Together with the investments from other partners, intensified UNICEF investment in these areas can help unleash the power of data for children, ultimately allowing governments, communities, and families to better identify, prevent, and respond to the threats that keep children from realizing their full potential.



## Investing Strategically

*Across UNICEF, strategic planning of our data investments happens at every level and covers a wide range of our partnerships. Regardless of the specific actors included in a given plan, our investments should always be premised on a commitment to government ownership and should take into consideration the investments of others.*

### **What strategic investing can help us do**

For decades, there were so many gaps in knowledge about the well-being of children that a call for ‘more data’ was nearly always warranted. Now, dramatic improvements in data availability and increased opportunities for data use necessitate more focussed strategic plans for investing in the most appropriate data, systems, and skills to tackle today’s challenges.

Ultimately, data will only impact the lives of children if they are appropriate, timely, and acted upon. By carefully analysing the needs and opportunities for data use, UNICEF can maximize the value of its own data assets as well as those of others.

### **Where we are with strategic investing**

Following the development of an organization-wide data framework, UNICEF offices around the world are now engaging in a three-part process to make our deployments of, and investments in, data even more strategic: first, articulating their specific strategic priorities for children; second, diagnosing the opportunities and challenges for using data to advance those priorities; and third, building an action plan for their future data investments based on that analysis. So far, more than a dozen offices have completed this work, with more offices launching work each month. The plans, however, are only the beginning.

In the countries where this work has taken place, UNICEF is engaging with its partners – in government, other UN agencies, civil society, and the private sector – to carry forward key elements of their data action plans. In Lesotho, just a few months after launching their strategy, the UNICEF office kicked off work to implement recommendations on a national data sharing policy and on new methods for making data more accessible and usable across the country.

Similar rollouts are underway from Palestine to the Philippines.

Looking across the diverse contexts where this work has taken place, several consistent themes have emerged, highlighting topics that require more sustained investments from UNICEF and the broader data community. These include raising the core data skills and data orientation of UNICEF’s workforce, offering a broader array of resources for engaging with and strengthening administrative data systems, and supporting offices to navigate the increasing politicization of data collection, analysis, and use.

### **...and where we want to be**

The common challenges identified through this process have set a clear agenda for where UNICEF needs to develop global, regional, and country capacity to better leverage data for results. For some of the commonly found challenges – such as data collection on historically marginalized groups – there are clear (though technically challenging) ways forward. In others, including shaping appropriate demand for and use of new data technologies, the road ahead requires developing new guidance, standards, and approaches to data work.

As the urgency for reaching ambitious global goals for children mounts, the need for dynamic, strategic, and scaled approaches to investing in data for action will rise. If UNICEF maintains its focus on matching-up data demand with appropriate supply and use, those investments can reap remarkable dividends, ranging from better-quality schooling to more efficient delivery of lifesaving vaccines.

### **Areas for investment**

- Scaling the practice of landscape analysis and action plan development across a broader range of contexts;
- Developing practical tools to tackle frequently found challenges identified through the analysis process;
- Supporting offices and governments to fund the implementation of their data action plans and priority investments.



## Strengthening Administrative Data

*Administrative data are collected through the routine provision of a service such as a health clinic visit, a court appointment, or school attendance; and are frequently aggregated from facilities for higher level government reporting. UNICEF and its partners are particularly interested in admin data that relate to individuals and harnessing these to improve development outcomes for children.*

### **What administrative data can help us do**

Administrative data are essential for communities, governments and organizations such as UNICEF to monitor progress, plan and deliver essential services, and ensure that no child is left behind. At a local level, data from an Education Management Information System, for example, can record school attendance and identify children at risk of dropping out and therefore require additional support. At a national level, that same system can offer an up-to-date picture of how children across the country are affected by issues such as classroom size and learning outcomes. Continuous data collection through a well-functioning admin data system can provide timely data that is not available through periodic surveys.

Making better use of existing data sources such as administrative data systems is crucial to meeting new demands for timely, relevant data. However, to make systems fit for this purpose requires more work in strengthening admin data systems to improve resilience and data availability, improving the usefulness of the data that the systems produce, and building capacity to address data quality issues. It also means creating opportunities for data linkage – both across sectoral admin data systems and with other data sources.

### **Where we are with administrative data**

Despite increased excitement about the potential of administrative data, many countries are still unable to produce essential data in areas such as health, education and civil registration, from admin data systems. Funding for the large-scale, multi-year investments required to re-shape national systems is often not reflective of donor interests in “quick wins” or early results, while many of the foundational issues that affect administrative data systems – such as data privacy and protection, infrastructure, transparency and

data governance – sit beyond the immediate influence of line ministries. At the same time, the landscape of admin data systems is changing rapidly with new opportunities, risks, and challenges such as digital technologies, biometrics and national ID processes. While these new horizons present unprecedented opportunities for linking data and gathering new insights, they also need to be governed by appropriate frameworks and monitored to ensure that they do not compromise children’s rights or exacerbate existing inequities within or between countries.

### **...and where we want to be**

While UNICEF’s longstanding work in sectoral admin data systems continues, new efforts are underway to focus more clearly on cross-sectoral issues. These include: developing guidance on new tools and technologies and improving access to existing tools and standards; identifying common areas of impact across sectors and prioritizing areas of need; evaluating emerging issues as systems evolve to meet new interoperability requirements and shift from aggregate data to more nuanced data; and building more institutional approaches to data protection and quality assessment.

UNICEF is also identifying best practices and capturing the lessons to address gaps in other sectors. For example, the Data Must Speak work in the education sector in Namibia and Nepal and health information systems development in West Africa are building capacity in local service providers and communities to use data to improve outcomes for children. In the process, they are also improving the quality of data available in national systems. Key insights from these experiences can strengthen community engagement and will inform UNICEF’s future programming.

### **Areas for investment**

- Promoting holistic assessment of and investment in the administrative data landscape using an admin data maturity model;
- Supporting transition planning and revision for systems to move from aggregate data to a unit-record structure;
- Building capacity to unpack data issues, analyse, and interpret administrative data;
- Advocating for continued system-building investments at scale.



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## Harnessing Humanitarian Data

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*Persistently fragile and humanitarian situations are home to some of the most vulnerable children in the world but our understanding of their changing conditions and our evidence base for managing and adapting interventions to reach these children, address their most urgent humanitarian needs and build their resilience to future shocks are weak.*

### What humanitarian data can help us do

With a clearer, more timely understanding of the situation of children and families before, during and after humanitarian crises, our preparedness and response can be more timely and efficient, and adapt more readily and effectively to shifting humanitarian needs. Being able to better estimate the numbers and granular locations of children and families most at risk of cholera outbreaks or being able to hear from and track the situation of those not-yet-reached in a fast-moving disaster response, could save lives and change long-term outcomes for children and their families.

### Where we are with humanitarian data

While we now have better tracking of humanitarian inputs and service outputs, humanitarian actors still struggle to track how the response is succeeding or not in shifting the situation of the population most in need, those reached and those not reached, and in tracking the effects of shifting shocks and threats of the crisis itself. Conditions are poorly understood because traditional sources of data are often out of date due to fast changing conditions or insufficiently disaggregated to shed light on the situation of those hardest to reach. And in contexts of sudden disaster and conflict, traditional sources of data are often completely absent. At the same time, too often, the data that are available go un- or under-utilized because the right people and resources are not in place at the right time to translate these into usable information to steer shifts in humanitarian action.

UNICEF and other humanitarian actors are experimenting with a range of options to address the key gaps but are struggling with both a lack of investment in the right data capacity before and during humanitarian crises, as well as a lack of convergence across disconnected approaches and initiatives, whether agency- or sector-specific.

### ...and where we want to be

In this fast-changing data landscape, UNICEF has begun mapping key data gaps, and catalytic initiatives and partnerships that can help sharpen understandings of the situation of children in humanitarian and fragile situations. It is clear that this requires a menu of approaches appropriate to different contexts. Seeking wherever possible to contribute with partners to global goods in this area, UNICEF is focussing on two key tracks.

#### *Better use of available data*

Some of the emerging priorities include: improving shared access to geo-referenced data sets and related cross-sector predictive analysis, for example, steering localized cholera preparedness; seizing opportunities provided by public and private 'big data' sources to generate 'good enough' information to fill key gaps in fast-moving responses; connecting key data processes across humanitarian and development programming, for example, linking national admin data systems and humanitarian-focussed monitoring platforms.

#### *Investment in new data collection*

This requires both immediate short-term data solutions as well as building more agile data processes for before, during and after humanitarian situations. The data solutions needed include issues such as tracking the situation of displaced, migrant and refugee children outside of camps and tracking the situation of children on the move. They also include specific challenging thematic gaps, for example, around evolving child protection issues, or getting better data on specific vulnerable groups, and disaggregation by gender, age and disability.

### Areas for investment

- Identifying and convening around critical data challenges/gaps and promising solutions for humanitarian solutions;
- Working with partners to deliver global goods on standards, methods and guidance, for the right mix of "good enough" data solutions for critical gaps in different contexts;
- Expanding solutions for data sharing and resources for cross-sectoral analysis;
- Building capacities and support mechanisms for country teams in applying the right solution for the right use.



## Deepening Data Savvy

*Ultimately, investments in better data and insights will only turn into results when individuals in a position to make change actually put those data to use. This, in turn, requires that UNICEF staff and their counterparts in governments around the world are comfortable with, capable of, and committed to using data in their decision making. In short, UNICEF and its partners must be data savvy.*

### What data savvy can help us do

From Haiti to Malawi, UNICEF has potent examples of what great data work can look like. Too often, however, those examples have hinged on the initiative and unique skills of specific colleagues who had the right instincts and skills to move from idea to action. Scaling those skills, attitudes, and practices across the organization and its partnerships is crucial for making great data work a core expectation of how UNICEF does its work.

A data savvy workforce understands the potential of data, knows how to unleash it responsibly, and is comfortable doing (or advocating for) just that. Data savvy requires more than hard data skills - it also relies on culture of data demand and use that must be supported at all levels of the organization.

### Where we are with data savvy

In nearly every context where UNICEF has worked to map the data landscape and develop a data action plan, one consistent theme recurs again and again: UNICEF and its partners need a step change in their capacities, attitudes toward, and comfort with data. Far from universal, however, are the specific data savvy elements required for each role in UNICEF or government.

The first step in building a new culture of data savvy then, has been identifying what good looks like in each function: the head of an office may not need to know how to run the latest analysis software, but she does need to know how to ask for the right analysis and when to deploy it with a minister. A nutrition expert, in contrast, should understand a good amount of the key data sources in his field, but might not need to speak about them with the news media on a regular basis. With a better sense of what savvy means in different

roles, UNICEF is now identifying the places where the organization's current capacity gaps are most glaring and is working to meet those needs with practical, proven solutions. Together with partners, UNICEF is shaping a repository of resources that respond to the most common data savvy obstacles. In 2018, a global data help desk was launched across the organization, designed to both expedite responses to colleagues around the world and to systematize organizational knowledge about frequently found challenges.

### ...and where we want to be

New resources are a necessary but insufficient investment to change the culture of data use within the organization. Through the Data for Action team, UNICEF is also working to create and scale-up a dynamic network of data practitioners and enthusiasts within the organization. This network will not only encourage staff interest in data but also help cultivate data champions in all areas of UNICEF work – from emergency analysts to human resources professionals and everyone in between.

There are still many areas of the data savvy agenda that will require additional learning, experimentation and revisiting along the way. In the coming two years, UNICEF will be piloting new approaches to building data savvy in a diverse set of country contexts, responding to the gaps identified as those offices develop their action plans. Building on that experience, the successes and failures will be shared openly across both UNICEF and its partners so that the widest range of organizations can apply the learning to their own efforts to strengthen data savvy.

### Areas for investment

- Reshaping career profiles of UNICEF staff to build data savviness into both recruitment expectations and ongoing human resource development;
- Creating and continually curating a repository of data savvy resources that respond to identify gaps and can adapt to a wide range of contexts;
- Expanding the impact of UNICEF investments in data savvy by linking them with – and learning from – the resources of others.



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To learn more about any of these specific examples or to get involved, please send a message to [dataforchildren@unicef.org](mailto:dataforchildren@unicef.org) or reach out to a member of the team:



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