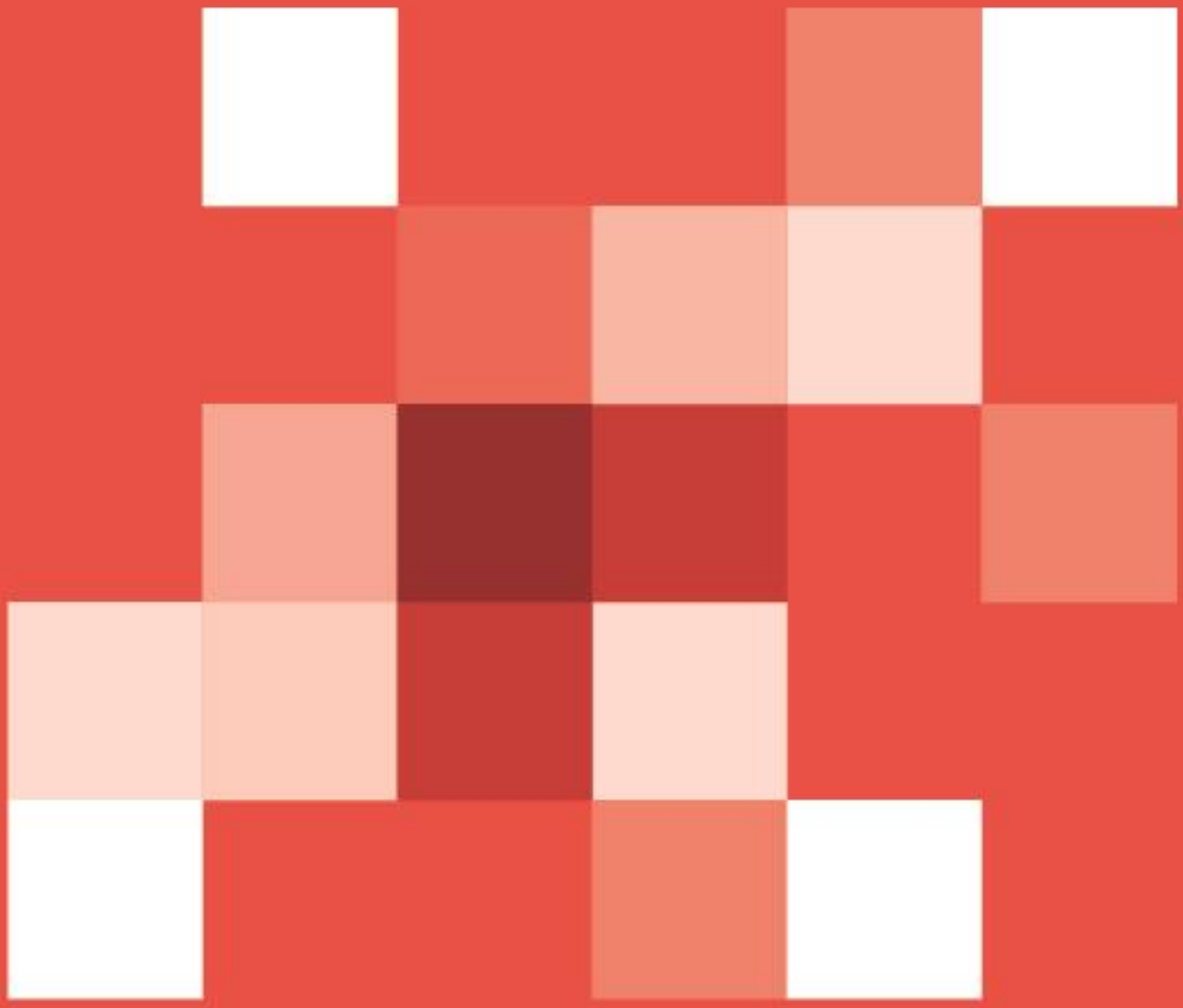
development initiatives



March 2020

Data issues and challenges for the UNICEF Bangladesh Country Office

Draft Diagnostic Report (v2)

Contents

1 List of Abbreviations

A2i	Access to Information
APSC	Annual Primary School Census
BBS	Bangladesh Bureau of Statistics
BCO	UNICEF Bangladesh Country Office
BDHS	Bangladesh Demographic and Health Survey
BRIS	Birth Registration Information System
CBCPC	Community-Based Child Protection Committees
CPP	Cyclone Preparedness Program
CC	Community Clinic
CPIMS+	Child Protection Information Management System
CRVS	Civil Registration and Vital Statistics
CRVSSC	CRVS Steering Committee
DCSF	Data for Children Strategic Framework
DDM	Department of Disaster Management
DGHS	Directorate General of Health Services
DHIS2	District Health Information System, version two
DI	Development Initiatives
DDMC	District Disaster Management Committee
DRRC	Disaster Risk Reduction Committee
EMIS	Education Management Information System
EWS	Early Warning Systems

EWARS	Early Warning, Alert and Response System
FAO	Food and Agriculture Organization
FFWC	Flood Forecasting and Warning Centre
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoB	Government of Bangladesh
HMIS	Health Management Information System
IMDMCC	Inter-Ministerial Disaster Management Coordination Committee
ISCG	Inter Sector Coordination Group
IOM	International Organisation for Migration
LTA	Long-Term Agreement
LDIM	Local Disaster Incident Manager
LDMT	Local Disaster Management Team
MoD	Ministry of Defence
MoDMR	Ministry of Disaster Management and Relief
MoHFW	Ministry of Health and Family Welfare
MoU	Memorandum of Understanding
MoWR	Ministry of Water Resources
MICS	Multiple Indicator Cluster Survey
MIS	Management Information System
MP	Member of Parliament
NDCC	National Data Coordination Committee
NIPORT	National Institute of Population Research and Training
NDMC	National Disaster Management Council

NWOW	New Way of Working
ORG	Office of the Inspector General of Registration
PMO	Prime Minister’s Office
RMU	Results Monitoring Unit
SDGs	Sustainable Development Goals
SVRS	Sample Vital Registration System
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNGA	United Nations General Assembly
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children’s Fund
UzDMC	Upazila Level Disaster Management Committee
VAC	Violence Against Children
WHO	World Health Organisation
WHS	World Humanitarian Summit
VAC	Violence Against Children

2 About this Diagnostic

2.1 Mandate

In 2017, UNICEF developed a global Data for Children Strategic Framework (DCSF), which outlines UNICEF's general approach to data work – including the full spectrum of work required to drive demand for, strengthen the supply of, and enable the use of data – as well as some concrete directions for the organization as a whole.[1] The next step in the process is to translate that general framework into action at country and regional levels. Development Initiatives (DI) has entered into a Long-Term Agreement (LTA) with UNICEF to support country and regional offices in their own strategic planning of data investments.

Development Initiatives is an independent international development organisation, which specialises in the role of data in driving poverty eradication and sustainable development.[2]

DI has been contracted to provide UNICEF Bangladesh Country Office (BCO) with this Diagnostic Report, supported by an accompanying Strategic Action Plan, making concrete and specific recommendations in relation to its investments in data over the next 3-5 years and beyond.

2.2 Context

Bangladesh's economy is growing rapidly. The government has invested significant sums into information technology (IT) – for example planning to distribute laptop computers to every state primary school in 2020. It launched Digital Bangladesh in 2007 to establish e-government processes. Supported by UNDP's Access to Information (A2i) programme since 2011, Digital Bangladesh has made strong progress, including developing a first-class SDG tracker.

However, these advances in IT have not been matched by as coherent a data strategy[3]. Indeed, the Government of Bangladesh (GoB) has shown limited commitment to digital data collection, analysis and use. There is scarcely any mention of data, or its value, in the current (seventh) five-year plan. The Bangladesh Bureau of Statistics (BBS) is underfunded, understaffed and has sometimes been side-lined when new programmes have been developed. Successful, externally funded information systems, such as the UNICEF-supported District Health Information System (DHIS2) currently have no

[1] https://data.unicef.org/resources/data-children-strategic-framework/
[2] http://devinit.org/
[3] BBS has a National Strategy for the Development of Statistics, but, as discussed in Section 3.4 below, this has little mandate or influence beyond BBS.

sustainable domestic income. As a result, one of the best-implemented health data management systems in the developing world is currently hampered by a lack of local IT support and data staff (despite plenty of skilled potential applicants for needlessly frozen posts) and by the failure to invest the small sum required to upgrade its overrun server.

DHIS2 is, by far, the best example of a management information system (MIS) in Bangladesh. Beyond health, digital administrative data has never been prioritised. Though it is widely collected, it is almost universally paper-based. There are also several well-known gaps. That makes evidence-based decision-making impossible regionally – at division or district level – let alone locally, at upazila or ward level. This is, in part, a reflection of Bangladesh's strongly centralised state, with almost all planning and decision-making controlled by the national government. But the lack of useful evidence from points of service delivery also prevents targeted decision-making at the national level. Disaggregated data is rarely made available from surveys, either. It is common for similar and overlapping surveys to be funded by different organizations, wasting resources, muddying the picture and further discouraging use. This makes it impossible for decision-makers or administrators – at any level – to identify locally-specific needs, drivers or trends. Evidence-informed decision-making is, in any case, rare – as is data use. There are no facilities for sharing or analysing data across departments or sectors. All this is affecting Bangladesh's ability to achieve the Sustainable Development Goals (SDGs). The GoB's transparent monitoring of SDG indicators is world-class. Now it needs to develop a data-centred strategy to meet the goals themselves.

The UNICEF Bangladesh Country Office (BCO) has long been in partnership with BBS for data collection drives, including the Multiple Indicator Cluster Survey (MICS) and surveys of the effective coverage of basic social services (CBSS). BCO also has partnerships with independent agencies for collecting data and reporting for specific projects. However, there is no evidence of a coherent, strategic approach to data. BCO supports substantial work on health and education administrative data but has a lighter touch in other sectors. Its data interests can be somewhat piecemeal, including desires to engage further in innovation, social media and, at the national level, in adaptation to climate change.[4] The BCO is approaching the next country programme cycle, 2021-2025. It is essential that a focused data strategy is at its heart. The period overlaps with Bangladesh's eighth five-year plan, SDG targets, and the expected attainment of middle-income status by 2024. These present good opportunities to seed fund, stimulate and encourage new, harmonised investment into management information systems to facilitate evidence-based decision-making in the coming years.

[4] Opinions expressed in interviews with BCO staff.

2.3 Methodology

Desk research was carried out in the week prior to the country mission (11-15 November 2019) and during the writing of this report. It focused on the policy and planning framework, mapping the data landscape of surveys[5] and administrative data, and understanding UNICEF's existing data-related priorities and investments.

During the country mission (18-29 November 2019) key informant interviews6 were conducted with all BCO sections in Dhaka and UNICEF and local government officers in Rangpur and Cox's Bazar and local government officials. Due to unforeseen circumstances meeting with national ministries and development partners were restricted to the Bangladesh Bureau of Statistics, A2i and the UN Data.

The BCO requested that the work should explore data concerns and opportunities in all the main areas of their investments, paying attention to three priority issues:

- Supporting the Government of Bangladesh (GoB)'s efforts to meet the Sustainable Development Goals (SDGs)
- Climate change adaptation and disaster risk reduction
- The humanitarian-development nexus in the context of the Rohingya refugee crisis.

The first of these is of central importance. This diagnostic report focuses strongly on the need to create reliable, digitised administrative data systems, in all sectors, in order to facilitate – and stimulate – the use of local data by government officials at all levels (as well as by UNICEF and other development partners), to support their efforts to achieve the SDGs. In many areas, this will be a difficult, long-term challenge. Nonetheless it needs to be a strategic focus. UNICEF can help make significant advances in the potential for data analysis and use, which would help to improve the lives of women and children in Bangladesh. Our analysis is therefore centred around sector-specific ways to improve administrative data and management information systems. It also offers evidence and guidance on the importance of improved data coordination and harmonisation, of stimulating data demand, and of local-level interoperability – building on the existing pilot Results Monitoring Units (RMUs).

The critical issues of climate change adaptation and disaster risk reduction are, in many ways, a microcosm of the data landscape in Bangladesh. At national level, both technology and data management are very good, coming together to

[5] See appendix 2
[6] See appendix 1

provide a high-quality early warning system. However, disaggregated, locally specific information is not currently being passed on to communities. We explore ways for BCO to focus its efforts on making linkages and enabling bottom-up data use, in order to help people to protect themselves.

2.4 Limitations

Bangladesh is a large and complex data environment. While technology and innovation are improving at a rapid rate, data is not yet a strategic priority and considerable technical and political obstacles remain. Government decision-making is motivated by many factors other than local evidence. Several of these obstacles, bottlenecks and structural weaknesses in the Bangladesh data landscape represent difficult challenges for the BCO, which has limited capacity to influence the government's institutional arrangements and culture. Combined with a broad mandate to examine all sectors, these issues also made it difficult for us to offer specific, detailed solutions. In line with the general aims of the DCSF, we have therefore focused on suggesting a broad direction for a UNICEF Bangladesh data strategy, focused on generating, digitising, systematising and using local service delivery-level data.

In the specific circumstances of Cox's Bazar district, the levels of political complexity – both in terms of the GoB's limited approach to data collection, and the sometimes thorny relationships between different UN and other donor agencies – make it particularly difficult to invest in developing a data nexus between those focused on development goals and humanitarian support. There are lessons that can be learned in Cox's Bazar and applied elsewhere in the country – most notably in relation to the Child Protection Information Management System (CPIMS+). However, it is beyond the remit of a data diagnostic to suggest ways to persuade humanitarian actors who are, in this instant and for various reasons, simply not interested in sustainable information management, to collaborate.

3 The political economy of data in Bangladesh

3.1 Economic growth

Bangladesh has been referred to as a 'development miracle' by a number experts.[7] The country has achieved remarkable progress despite significant challenges, including weak governance and political upheavals, to catapult itself from a low-income country just two decades ago, to a middle-income country. Bangladesh, about the same size as the U.S State of Iowa in land mass, has a population of 162 million people. Yet despite the high fertility rates of its early take-off stage (birth rates which have now been effectively controlled) the country has managed to turn its people into an incredible resource for rapid socio-economic development

Buoyed by garment exports, the backbone of the country's industrial sector (which accounted for more than 80 per cent of total exports of $34.25 billion and surpassed $28 billion in 2016),[8] Bangladesh has had sustained economic growth averaging 6.4 percent per annum between 2008 and 2018,[9] and its GDP has ballooned from $69 bn in 2005 to $227 bn in 2017 – and is expected to rise to $322 billion by 2021.[10] This growth has meant a remarkable transformation for the people of Bangladesh.

The country's economic fortunes have lifted a significant number of Bangladeshis out of poverty, and boosted life expectancy.[11] The average life expectancy is 72 years.[12] Per-capita income has surpassed $1,909[13] and the rate of extreme poverty in the country has dwindled from roughly 20% to just under 9%, although nearly 15 million of the 162 million people in the country still live on less than $1.90 a day.[14]

Despite this positive trajectory, the country still faces significant development challenges. While economic growth has been impressive, it has not benefited everyone equally. Subnational disparities are evident in the coverage of basic social services between rural and urban locations, by geographic regions and by

[7] https://www.thediplomaticsociety.co.za/archive/archive/2850-bangladesh-the-development-miracle
[8] https://www.khaleejtimes.com/khaleej-times-dubai-uae-dhaka-bangladesh
[9] https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2018&locations=BD&start=2008
[10] GDP in current prices. https://bdnewsnet.com/bangladesh/economy/record-7-86-percent-gdp-growth-of-bangladesh-economy-in-2018/ (one more needed)
[11] https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=BD, https://data.worldbank.org/indicator/SI.POV.DDAY?locations=BD
[12] 70 years for men, 74 years for women. https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=BD
[13] This says 4,570 https://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD?locations=BD
[14] The stat that keeps coming back is 14.8% in 2016. https://data.worldbank.org/indicator/SI.POV.DDAY?locations=BD

gender and wealth. Children, who comprise 40 per cent of the population, still face vulnerabilities, including child marriage and malnutrition.

3.2 The centralised state

The current system of government is built around a strong, centralised state. Even though local government exists at division, district and upazila level, these have very little autonomy, and senior staff are appointed (or 'seconded') by the centre.[15] Policymaking, legislation and budgeting follows the same pattern.

The implication of this governance approach to the data ecosystem and the use of evidence over all in policy and planning is that most decisions made at national level will likely be anchored not entirely in participatory approaches but in the best interests of the government at the centre, and not necessarily on data and evidence. It also means that because of little independent decision making at the local government level, the collection, sharing and use of data locally will be fraught with challenges as the authorities have to repeatedly consult the chain of command on what to do and how. The tools and strategies for data production and use will be developed at the top and handed down for implementation, a situation that may result in many decisions that may not be contextually fit for purpose

3.3 National development plans

The 'development philosophy' of Bangladesh, according to the seventh five-year development plan (FYP 2016-20), is 'Growth with equity and social justice'.[16] The country aims to pursue an inclusive growth strategy that aims to reduce poverty and income inequality, by ensuring access of the poor to economic resources and employment, reducing regional imbalances and ensuring participation of women, youth and other vulnerable groups into the economy.

The five-year rolling plans are based on achieving 'Vision 2021', the political manifesto of the current government before winning the 2008 election.[17] It is an envisioning of Bangladesh for the year 2021, the country's 50th anniversary, in terms of where the country aims to be. The aim is to get there through technology fuelled development. Even though the policy has been criticized as utopian in the context of Bangladesh's governance and development challenges, most government policies appear to be tailored to this goal: high-growth and inclusive-aspirational, 'respectful of heritage and yet opportunistic in its use of new

[15] http://open_jicareport.jica.go.jp/pdf/12231205.pdf
[16] https://erd.portal.gov.bd/sites/default/files/files/erd.portal.gov.bd/page/2f97258a_6f25_479a_8545_a498c65783f2/Development%20Planning%207FYP%20&%20SDG.pdf
[17] 7th Five Year Plan https://www.unicef.org/bangladesh/sites/unicef.org.bangladesh/files/2018-10/7th_FYP_18_02_2016.pdf

technologies.'[18] The country has moved up to low middle income status but, more importantly, by human development indicators, achieved a level of development commonly predicted for twice its per capita income.

The seventh FYP began with the country having entered the ranks of middle-income countries and coincided with the launch of the UN post-2015 Sustainable Development Goals (SDGs). With this as a backdrop the plan centred on three themes[19]:

- GDP growth acceleration, employment generation and rapid poverty reduction. A broad-based strategy of inclusiveness with a view to empowering every citizen to participate fully and benefit from the development process.
- A sustainable development pathway that is resilient to disaster and climate change; entailing sustainable use of natural resources; and successfully managing the inevitable rise in urbanisation.
- Aggressive technological advancement.

3.4 Digital Bangladesh

Bangladesh's ambitions to become an ICT hub in South Asia have made remarkable progress over the years. The ICT sector has grown by 40 percent annually since 2010, driven by both public and private sector initiatives.[20] The country exports a range of digital and software services.[21] Digital infrastructure however remains limited and digital literacy is very low in Bangladesh.[22]

Digital Bangladesh was launched in 2009 as an ambitious plan to turn the country into a digital economy by 2021 and a knowledge-based economy by 2041. It is built around four pillars: Human Resource Development; Connecting Citizens; Digital Government; and Promotion of ICT.[23]

5,000 digital centres have been established in all the unions and municipal areas in the country. About 23,500 km optical fibre cable was installed throughout the country. The number of internet users has crossed 9 crore. Tele-density has crossed 93 percent. Twenty-eight High Tech Parks are being established in the country. Bangladesh became the 57th satellite member country last year by

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[18] Ibid.

[19] https://www.unicef.org/bangladesh/sites/unicef.org.bangladesh/files/2018-10/7th_FYP_18_02_2016.pdf

[20] https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2159

[21] https://www.ceicdata.com/en/indicator/bangladesh/exports-ict-goods

[22] https://www.dhakatribune.com/bangladesh/2018/07/11/digital-bangladesh-a-reality-now

[23] Article by State Minister for ICT, Ministry of Posts, Telecommunications & IT, https://www.daily-sun.com/post/407497/2019/07/15/Digital-Bangladesh--a-Story-of-Transformation

launching its first satellite Bangabandhu Satellite-1 successfully into space. This achievement has taken Bangladesh to a newer height in the global arena.[24]

One of the 7th FYP 2020 targets is for all primary schools to have at least one multimedia classroom and for 30% to have an ICT laboratory.[25] Perhaps more realistic is a plan to provide each public primary school with two laptop computers.[26]

Not included in Digital Bangladesh's priorities are the development of national data infrastructures that serve public administration, service delivery and official statistics. While infrastructure is in place to expand digital services available for citizens in their interaction with government, little has been done to date to improve the human capacity, collection, storage and analysis of data needed to manage and monitor social services. An education specialist estimated anecdotally that fewer than 5% of primary school head teachers currently have the skills to use a spreadsheet.[27] Though this figure will rise substantially as the next generation of more technology-literate teachers rises through the system, it is an indication of the challenges that remain.

3.5 The National Statistical System

The Statistical Act of 2013 mandates the Bangladesh Bureau of Statistics (BBS) as the sole agency responsible for generating official statistics.[28] While in most countries the law gives national statistics offices (NSOs) power over the entire national data system, BBS appears to stringently take this definition to the letter, by not significantly considering non-official data as possible complementary sources. This means that administrative data falls outside BBS's remit. The statistical system, like much of government, is centralised. BBS is mandated to "collect, compile, analyse and publish statistics on all sectors of the economy to meet the needs of development planning, research, policy and decision making." Although field offices have been established down the administrative hierarchy, all decision-making is done at the centre.

BBS' legal mandate, moreover, is not well reflected in practice. Ministries do not automatically share their own data with it. BBS' legal powers in some instances are non-enforceable as a result of limited political power and capacity.[29] The limited authority of BBS in terms of its execution abilities can in part be explained by the fact that, until 2013, BBS operated without a legal mandate, a problem that

[24] http://www.newagebd.net/article/75234/full-text-of-budget-speech
[25] https://www.unicef.org/bangladesh/sites/unicef.org.bangladesh/files/2018-10/7th_FYP_18_02_2016.pdf
[26] Interview with upazila education officers in Cox's Bazar.
[27] Interview with UNICEF education specialist, Dhaka
[28] https://unstats.un.org/unsd/demographic-social/meetings/2017/bangkok--international-migration-data/Session%206b/Session%206%20Bangladesh.pdf
[29] Chapeau_of_Collaborative_SDGs_framework_07.01.2019 - https://docs.google.com/document/d/1RU3yScgxxrrtTf9_oNeI9eTcg2giDFkDYbFhRnzk5ec/edit?usp=sharing

significantly hampered the BBS's ability to assert its authority in the collection and dissemination of data.[30] During that time, different agencies charged with collecting statistics operated under different legal mandates. This has led to these agencies holding onto their data production mandates even after the promulgation of the 2013 Act. Perhaps as a result of this, BBS is underfunded, and consequently understaffed by 30%.[31]

Consequently, there are still many coordination problems in the Bangladesh statistical system. The National Institute of Population Research and Training (NIPORT), for example, is mandated by the Ministry of Health and Family Welfare (MoHFW) to conduct studies and operational research in the health and population sector. NIPORT was established in 1979 to satisfy the growing needs for demographic, social, bio-medical, and evaluative research.[32] NIPORT provides "task oriented in-service training to health and family planning program personnel, and conducts program focused studies and operations research in the health and population sector in Bangladesh."[33] NIPORT also conducts a number of surveys that are designed to collect information on health, population and nutrition, the most prominent of which is the USAID-funded Demographic and Health Survey (DHS). Between 2000 and 2018, DHS was completed six times.[34] Whereas, in most countries, NSOs carry out DHS, for example, in Bangladesh DHS is done by NIPORT with limited coordination with BBS. On the contrary, BBS does parallel surveys like MICS and NHSs. Having DHS and MICS conducted from different agencies is far from ideal, as they cover similar terrain. The results from the 2017 DHS survey are still pending publication as a result of concerns over methodology and quality raised by BBS.[35]

Inadequate coordination between BBS and other agencies with data production mandates is not restricted to NIPORT. Several other agencies also collect their own data. This problem is exacerbated by donors who in the most part fund these multiple data collection initiatives.[36] In addition, the donor-funded data programme A2i is mandated separately by the prime minister's office (and mentored by UNDP). A2i does collaborate with BBS – most notably on the national SDG tracker – but a closer relation would greatly benefit both organisations, and government generally.[37]

[30] Assessment of the capacity of Bangladesh Statistical System to produce the core set of economic statistics, 2011 https://unstats.un.org/unsd/nationalaccount/workshops/2011/bangkok/ESCAP-115.PDF

[31] Interview with former BBS executive director
[32] http://en.banglapedia.org/index.php?title=National_Institute_of_Population_Research_and_Training
[33] http://www.mohfw.gov.bd/index.php?option=com_content&view=article&id=51&Itemid=114&lang=en
[34] See Appendix 2
[35] Interview with BBS officials
[36] Interview with A2i, BBS officials
[37] Interview with A2i officials

Bangladesh does relatively well on the World Bank's Statistical Capacity Indicator[38], however. Statistical capacity is defined as a nation's ability to collect, analyse, and disseminate high-quality data about its population and economy. Quality statistics are essential for all stages of evidence-based decision-making, including monitoring social and economic indicators, allocating political representation and government resources, guiding private sector investment, as well as informing the international donor community for program design and policy formulation. The 2018 score for Bangladesh was 72 percent, which is above average in the region.

3.6 The National Data Coordination Committee (NDCC)

The Government formed the National Data Coordination Committee (NDCC) to ensure coordination among data producing agencies with the national statistics agency of BBS. NDCC is intended "To harmonize data generation from different data producing agencies and to prepare and supply quality, up-to-date and acceptable data of indices intended for sustainable development and for international reporting", according to the Ministry of Planning (MoP). NDCC is also supposed to provide guidelines for SDG data generation and international reporting.

This committee currently was established specifically to support the BBS with SDGs. The NDCC attempts to standardise domestic data for SDG and international reporting. It has not been made clear in any documentation whether the following responsibilities of the NDCC are SDG-specific or for data collection in general. The lack of an established and authoritative coordination body means data standards are poor. For example, in practice there is no single source of official indicators and their corresponding definitions.

There is a need for a clear, coordinated and well-funded strategy to:

- Deal with data gaps.
- Increase the data-collecting capabilities of all agencies, by organising training sessions, workshops and seminars.
- Promote the flow of information towards BBS.
- Create a unified national indicator framework.

[38] http://datatopics.worldbank.org/statisticalcapacity/CountryProfile.aspx

4 Meeting the SDGs

The Sustainable Development goals (SDGs) are, naturally, a high priority for UNICEF in Bangladesh. Bangladesh performed remarkably well in the Millennium Development Goals (MDGs), achieving most of them in record time. Much of that success reflected good use of evidence to direct and target scarce resources towards areas of greatest need. For a Government to plan and monitor the impact of its policies, it must be able to benchmark data and see year on year progress.

The country is on track to do well on the SDGs too. Again, monitoring has been prioritised and is impressive by international standards. Bangladesh already has baseline data for 127 SDG indicators[39], including for 43 of the 50 child-related indicators for which UNICEF has oversight. Unusually for a country office, there is therefore no need for the BCO to focus efforts on SDG monitoring. However, there are significant gaps in the data required to allocate resources effectively to ***meet*** SDG targets.

4.1 National Monitoring Framework (NMF)

Bangladesh has prioritised its own set of SDG-related national priorities, known as the "39+1." This is a sensible and well thought-through attempt to align the SDGs with the national planning system – and specifically with the aims of the current (seventh) Five-Year Plan (FYP). This alignment process has generated a set of focused and relevant targets that are aimed at leaving no one behind in the shortest possible time[40]. The national monitoring and evaluation framework designed to assess progress against these is robust[41]. It provides detailed updates not only on achievements but also on the current status of monitoring data in relation to each specific goal and target.

The Seventh FYP itself sets out all the government's operational activities as well as objectives. It is strong on ICT infrastructures and e-government services (such as those provided by the Digital Bangladesh project) but has no explicit focus on the value of data, or of how to use it to meet targets. There is a need for advocacy to encourage the Planning Commission to include a section on data strategy in the Eighth FYP. This needs to ensure that there is further alignment between the national development plan and the SDG monitoring framework, focused on the data required to implement programmes that will achieve agreed

[39] Sustainable Development Goals: Bangladesh Progress Report 2018. https://www.undp.org/content/dam/bangladesh/docs/Publications/Pub-2019/SDGs-Bangladesh_Progress_Report%202018%20(1).pdf
[40] http://www.sdg.gov.bd/page/thirty_nine_plus_one_indicator/5#1
[41] http://pksf-bd.org/web/wp-content/uploads/2018/11/5.-Monitoring-and-Evaluation-Framework-of-Sustainable-Development-Goals-SDGs-Bangladesh-Perspective_opt.pdf

goals. It is important that this strategy focuses on the data requirements to meet the NDP and SDGs, not only on indicators that monitor outcomes. For example, to reduce the maternal mortality rate, performance data on antenatal care is as important as the actual mortality statistics.

4.2 Open Data

Bangladesh's **Open Data Portal** (ODP) was launched in 2016, containing publicly available datasets from more than 35 Ministries and related agencies.[42] It was built for the Prime Minister's Office (PMO) with the help of BBS and the A2i programme.[43] A2i is managed by the ICT Division in partnership with the Cabinet Division and the Prime Minister's Office, with assistance from UNDP and USAID.[44] It therefore constitutes a high-level partnership between the government and international donors. It also represents a collaboration between the public and private sectors.

The Open Data Portal was created with the specific aim to assist the achievement of SDG 16: 'to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.' In addition, access to more and better data is a cross-cutting issue and a pre-condition for the achievement of all 17 SDGs and their targets. The Government of Bangladesh has therefore demonstrated admirable commitment to be open with its citizens, with the stated aims to: enhance the scope of research to identify, encourage and develop innovative solutions for better public service delivery; create opportunities for new jobs and more investment; and make government more transparent and accountable.

Housed within the Open Data Portal is the 'SDG Tracker'.[45] An effective, comprehensive and user-friendly SDG monitoring framework, the SDG Tracker is intended to create a data repository for monitoring information relating to the SDGs, along with other national development goals. It was also developed by A2i, in collaboration with the General Economics Division (GED) of the Planning Commission and other government and private stakeholders. It is designed to strengthen timely data collection and improve situation analysis and performance monitoring of the SDGs.[46] As a searchable, web-based database, it also provides a publicly available snapshot of progress in meeting the SDGs and other government targets. The SDG tracker holds data on 43 of the 50 child-related SDG indicators. The Government of Bangladesh has therefore delivered high-

[42] http://data.gov.bd/dataset
[43] http://data.gov.bd/
[44] https://A2i.gov.bd/
[45] http://data.gov.bd/dataset/sdg-tracker-bangladesh-sdgs-data/resource/b030eb26-a3a6-404e-9440-698e24bdbcd4
[46] http://www.sdg.gov.bd/page/aboutsdgtracker/3#1

quality, transparent monitoring in its efforts to meet the SDGs. It is more than willing to be judged by global standards and is keen to gain international credibility. The SDG tracker is impressive enough for the government to have presented it at the 2019 United Nations General Assembly (UNGA), earning justified acclaim.

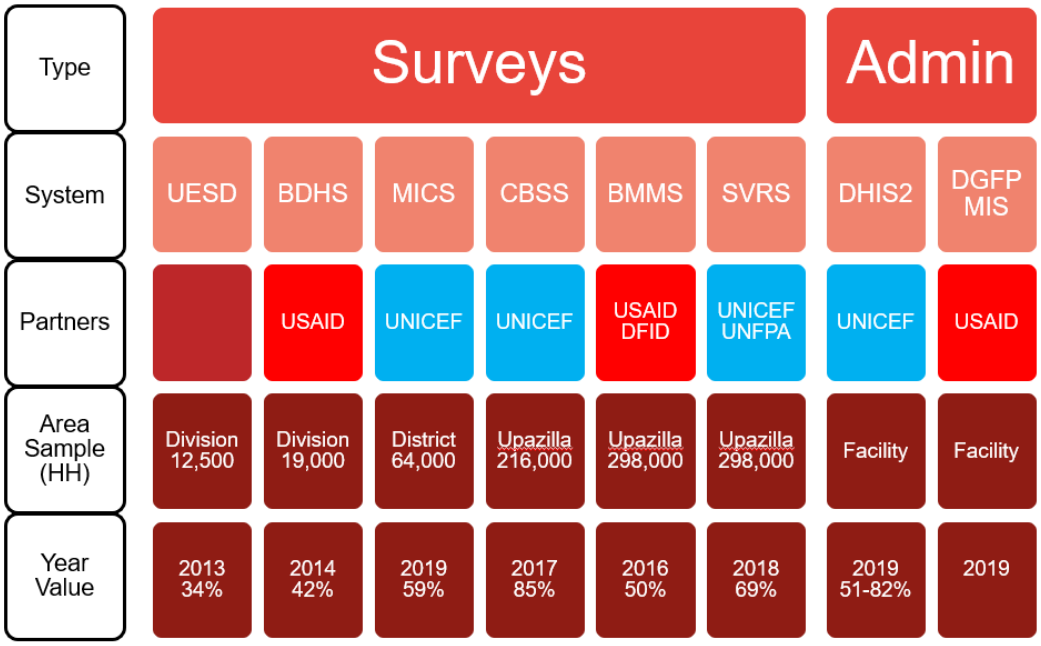
The SDG tracker uses traditional data sources such as censuses, surveys and administrative data, as well as plus information from Ministries, Directorates and the private sector. Although A2i designed and developed the SDG Tracker with the aim of leading to efficient resource allocation and effective policy making for inclusive and sustainable development, all data is currently geared solely towards SDG monitoring. The tracker does not currently hold data on how to meet SDGs, or that could be used for evidence-based decision-making to achieve SDG targets.

4.3 National vs sub-national data

Improving the data that will help to deliver better progress towards the child-related SDG goals themselves is a challenge far greater than the monitoring framework itself. Poverty, under-nutrition, disease, education, access to clean water, sanitation and child welfare all remain significant challenges in Bangladesh. If the country is to meet its SDG targets, good reporting is not enough. At the moment, the national monitoring framework provides estimates of progress towards SDG targets only at the national level. To be useful to guide targeted decision-making, both government and international agencies need local data, in order to identify specific problems and drivers. Without it, targeted interventions will be part-guesswork and less effective.

Compared to many countries, there is plenty of scope for disaggregating survey data relating to SDG indicators down to district level and below. For example, Figure 1 below shows all the surveys that include information on a single data point – attendance by health professionals at birth – in the last six years. Three of these can be disaggregated to upazila level.

Figure 1. Duplication of effort: Skilled attendance at birth metrics



Some of these surveys are conducted on a huge scale. At upazila level, a standing cadre of the same data collectors (all female) is organized to repeatedly survey a set of 100-150 households, on behalf of different government agencies and/or donor funders. Many of these surveys are similar, representing a waste of effort and resource. However, they also mean that recent data is available on several SDG indicators, that could be disaggregated all the way down to household level. Publishing survey data at upazila level – ideally via searchable dashboards – before compiling national statistical reports – will improve timeliness and incentivise accuracy.

Data availability at lower levels remain a significant obstacle. There are gaps in the data needed to devise programmes that will achieve SDG targets, across all divisions and sectors (see appendix 4, which summarises feedback on knowledge gaps received from UNICEF field offices). The challenge is to ensure that locally collected data is useful locally. This means creating management information systems in all sectors and feeding them with the raw data that exists but is not currently made accessible. Then, in order to get more timely, comprehensive data, the next step is to invest in digital administrative data collection. Good administrative data, when aggregated to district, division or even national level, gives a completer and more nuanced picture than repeated surveys (especially when sophisticated surveys – such as MICS – are too time-consuming and costly to conduct frequently). Just as importantly, administrative data can be disaggregated too. If made accessible to local decision-makers and communities via dashboards, it would enable individual clinics, schools or local government officials to identify issues to prioritise in their area.

Building reliable administrative data systems is a challenge in every country. However, there is a unique opportunity to persuade government agencies in Bangladesh, because of the GoB's commitment to SDG monitoring and strong record of investment in IT. Digital Bangladesh is delivering an impressive suite of useful e-government tools. For GoB to invest in good quality, accessible data would be a logical next step. By funding pilots and building partnerships – with the Bangladesh Bureau of Statistics in the first instance, then with relevant ministries – BCO can also demonstrate how data can be used to achieve SDG targets in different sectors.

5 Demographic foundations

5.1 Census

In 2011 the Bangladesh Bureau of Statistics (BBS) conducted the fifth Population and Housing Census since the country's independence. It was completed in two parts – a short questionnaire of 25 questions covering the entire population and an extended 82 question survey from a representative sample.[47]

Preparation has begun for the 2021 Household and Population Census. In terms of the volume and the scope of the information set to be collected, it is the most ambitious census yet. A new "multimodal" method comprising of both e-Census and in-person interviews is going to be used[48] and, unlike 2011, it will include non-citizens and Bangladeshi expatriates.[49]

5.2 CRVS and legal identity

Birth registration of children under five years has improved gradually from less than 10% in 2004 to 40% in 2008[50], and 56% in 2019.[51]

Historically, however, the different vital events contained within Bangladesh's CRVS envelope have been collected by institutions autonomously administering disconnected systems, without an overarching coordinating authority. Separate mandates fell to the Office of the Registrar General (ORG),[52] the Office of Inspector General of Registration, the Law and Justice Division, the Health Services Division of DGHS and BBS.

Following a ministerial conference in 2014, the government committed itself to an integrated approach, setting up a CRVS Secretariat within ORG – to "streamline and synchronize" the fractured CRVS system – and a CRVS Steering Committee (CRVSSC) at the same time. This was good practice, giving the ORG clear responsibility for cross-government implementation of CRVS in Bangladesh.

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[47] Population and Housing Census 2011: Socio-economic and Demographic Report http://bbs.dhaka.gov.bd/sites/default/files/files/bbs.dhaka.gov.bd/law_policy/6ed6b42c_2015_11e7_8f57_286ed488c766/Socio-Economic%20and%20demographic%20Report%202012.pdf

[48] Master Plan for Population and Housing Census-2021 https://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/29755028_3f23_435c_adaa_509e468ed076/F.%20MASTER%20PLAN%20%20%202-10-18.pdf

[49] https://www.dhakatribune.com/business/2019/10/29/6th-population-and-housing-census-begins-jan-2-2021

[50] https://dghs.gov.bd/images/docs/CRVS/bgd_crvs_case_study_2014.pdf

[51] Unpublished preliminary results from MICS 2019

[52] CRVS in Bangladesh. http://crvs.gov.bd/about/crvs-in-bangladesh. Note that the Office of the Registrar General, Birth and Death Registration was created in 2013 to permanently administer birth and death registrations.

Bangladesh wants to establish a robust and effective CRVS process based on a Unique ID (UID) system and link it with service delivery processes. Along with the six components (birth, death, marriage, divorce, adoption and cause of death) we have also added enrolment in the education system, and migration (in and out) as major components of CRVS in Bangladesh. And then, to link them with the Bangladesh Bureau of Statistics (BBS) for generation of Vital Statistics (VS) and with other services delivery processes especially the Social Protection Programs, we are developing an Integrated Service Delivery Platform as part of CRVS implementation plan. We call this model as CRVS++.[53]

CRVS++ has led to breakthroughs in the completeness, coverage and timeliness of the data collected have been achieved. It has improved the existing Birth Registration Information System (BRIS) that has been operational since 2010. According to a recent study, a total of 164 million births were registered in BRIS by October 2018, although this is believed to contain a substantial number of duplicate records.[54]

The drive to improve CRVS uptake has perhaps been hindered by the success of the Sample Vital Registration System (SVRS) which is a large-sample annual survey tracking vital and civil events.[55] SVRS has been producing trusted statistics since 1980. It was established to produce inter-censal statistics, using a sample of 300,000 households. Results, disaggregated to the district level, are published in paper reports each year.[56]

Legal identity is the responsibility of the National Identity Wing of the Bangladesh Election Commission[57]. ID cards have been issued since 2006, replaced in 2016 with biometric and microchip embedded smart cards, available free of charge to all adult citizens.[58] Although tied to voter registration, ID cards can be used to access a range of public services including gas and electricity connections, insurance schemes and government pensions.[59] Officials hoped to reach all of the approximately 100 million voters in Bangladesh by the end of 2017 but, according to the World Bank's 2018 global database, 53 million still do not have an ID card.[60]

In 2015, the GoB published a National Social Security Strategy which included plans for a Single Registry Management Information System "based on a national

[53] http://crvs.gov.bd/about/crvs-in-bangladesh
[54] Danish National Id Centre: Birth registration and birth certificates in Bangladesh - https://nidc.dk/-/media/nidc/Dokumenter/Notatbibliotek/30012019-Bangladesh---Birth-registration-and-birth-certificates-in-Bangladesh.pdf?la=da&hash=ED4990A8DE647B38FBFAE86FBA964C146D016FCB
[55] The 2018 survey covered 297,000 households
[56] http://www.bbs.gov.bd/site/page/ef4d6756-2685-485a-b707-aa2d96bd4c6c/Vital-Statistics
[57] http://nidw.gov.bd/
[58] https://www.dhakatribune.com/bangladesh/2016/10/02/19424/
[59] https://www.digitalasiahub.org/2016/10/30/bangladesh-introduces-smart-national-identity-cards/
[60] World Bank. 2018. ID4D dataset. https://datacatalog.worldbank.org/dataset/identification-development-global-dataset

identity system of all Bangladeshi citizens".[61] A subsequent planning workshop in 2017 referenced the "importance of Civil Registration and Vital Statistics (CRVS) on the Single Registry."[62] Nothing has yet materialised from these plans.

Despite advances in data collection – some of it digital – there is uneven interoperability between CRVS and national ID. For example, the MIS for death registration does not connect to the online Birth Information Registration System (BRIS), and, in turn, neither receive data from the health management information system (DHIS2).

Financial and technical support for the creation of a single, comprehensive civil register that is integrated with national ID and other core services, such as social protection, would provide a solid cornerstone on which the GoB could advance its national data infrastructure.

Also worthy of support is the recent formalisation of the relationship between GoB and Plan- International in the piloting of OpenCRVS, "an open-source digital CRVS solution that is free to use, adaptable to the country context, interoperable with other government systems (e.g. health and ID systems), and rights-based to ensure it protects and provides for those most vulnerable."[63] Piloting in two districts began in January 2020.

[61] http://socialprotection.gov.bd/wp-content/uploads/2018/09/National-Social-Security-Strategy-English.pdf
[62] http://socialprotection.gov.bd/en/2017/12/10/workshop-on-single-registry-management-information-system-mis-and-inauguration-of-social-protection-website-for-ssps-programme/
[63] https://www.opencrvs.org/our-solution

6 Health Data

Bangladesh has made progress in improving health outcomes for young children and their mothers, but the rate of improvement has slowed in recent years.[64] Significant challenges remain, including a high maternal mortality ratio of 176 per 100,000 live births, with most deaths due to delivery by unskilled birth attendants at home and a lack of comprehensive emergency obstetric care from a skilled provider at a medical facility. It is estimated that 38 percent of all children are now born with a low birthweight, with childhood stunting at 36 percent.

According to the Centre for Policy Dialogue (CPD), the share of the national budget allocated to health is Bangladesh is shrinking and is now among the lowest in South Asia, despite pledges made by the government in the current five-year plan.[65] Figure 2, below, shows that budget allocations for health have started to rise, in absolute and relative terms, since a low point in 2016-17.

Figure 2: Budget allocations for health, 2014-19

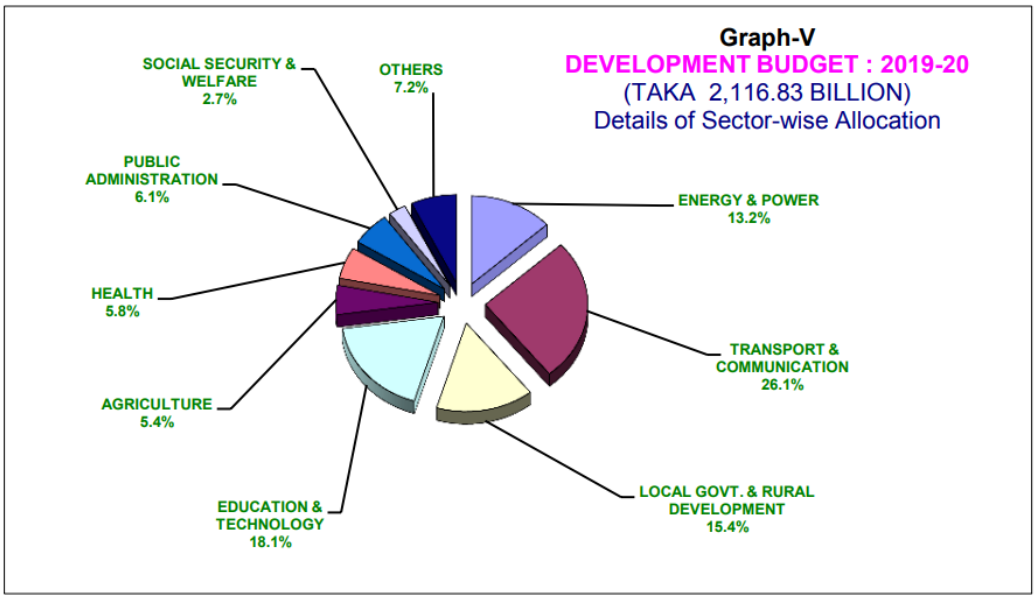
BUDGETARY ALLOCATION FOR EDUCATION IN PAST 5 YEARS			BUDGETARY ALLOCATION FOR HEALTH IN PAST 5 YEARS		
Fiscal Year	GDP	Total Budget	Fiscal Year	GDP	Total Budget
2018-19	2.09	11.4	2018-19	0.92	5.03
2017-18	2.09	12.6	2017-18	0.89	5.39
2016-17	2.19	16.1	2016-17	0.34	2.46
2015-16	2.18	14.3	2015-16	0.73	4.76
2014-15	1.85	11.7	2014-15	0.69	4.35

Source: Centre for Policy Dialogue (CPD)

Figure 3, below, shows a further slight increase in the percentage of the budget earmarked for health in the current financial year. When low resources are available in critical sectors, there tends to be even less money allocated for strengthening systems for evidence and monitoring and evaluation, especially data ecosystems.

[64] https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0211875
[65] https://www.dhakatribune.com/bangladesh/2018/06/29/budget-allocations-for-health-education-continue-to-shrink

Figure 3: General allocation, Financial Year 2019/2020



In spite of this, the Ministry of Health and Family Welfare (MOHFW) has initiated the development of a national Digital Health Strategy, supported by WHO Bangladesh.[66] This is in line with the 2011 National Health Policy, which remains the guiding document for management of the healthcare system, supplemented by sub-sector strategy documents such as the Maternal Health Strategy and National Adolescent Health Strategy. The National Health Policy emphasized the importance of health system strengthening, with health information systems named as one of the essential building blocks of an effective framework to improve the accessibility, quality and affordability of health services. As a result, the Bangladesh health sector's management information system is impressive – and digitised to a far greater degree than in other sectors.

UNICEF is engaging with the continuing development of the Digital Health Strategy. A workshop was held in 2019 to align the strategy with Bangladesh's current policies and planning priorities and also to assess and map the current digital health interventions using the Digital Health Atlas (DHA), a registry platform built to map out digital health initiatives for strengthening the impact of investment and coordination.[67] Once finalized, the digital health strategy is intended to provide direction for efforts to use digital technologies in a coordinated way for further strengthening the health system.

[66] https://www.who.int/bangladesh/news/detail/17-10-2019-bangladesh-initiates-digital-health-strategy
[67] Ibid

6.1 Data Systems

Health is the only sector in Bangladesh that currently has a fully functional and accountable management information system – the District Health Information System (DHIS2), supported by UNICEF. In our opinion, this is the best developed HMIS deployment in the developing world. Information can both be input and accessed across over 13,000 community clinics (95% of the nationwide total) and is widely used daily to read and update individual patient records. It is wide-ranging, covering immunisation, ante-natal and post-natal care and nutrition status, as well as records of illness and treatment. Demand for data from DHIS2 by local officials and planners is increasing, although ability to use the data at lower levels of government remains low.[68]

Its main weakness is that DHIS2 data is only available on patients who attend public clinics. Therefore, morbidity and mortality statistics, for example, simply exclude those who do not present themselves for treatment, or who go to private clinics. Including private sector data within DHIS2 is therefore a high priority. UNICEF has already organized meetings at divisional level between public health officials and private providers to discuss health data, focused on finding ways for private clinics to capture patient data and feed it into DHIS2.[69] Options UNICEF could consider include:

- Advocacy for MOHFW to enforce the existing stipulation in private health clinic licenses that they are required to report into DHIS2.
- Financing the development of devices and training to enable private providers to input data, either directly into DHIS2, or to divisional public health departments for them to add it to DHIS2.
- Financing the development of a dashboard to monitor which clinics are and are not uploading data to DHIS2 as required.

6.2 Investment

Despite its success, DHIS2 remains dependent on external funding, including from UNICEF. In our view, it is indicative of the GoB's indifference to the importance and value of MIS that it has not secured enough domestic resources to sustain the future of DHIS2 without external support. The BCO should continue to provide funding for DHIS2, while also seeking to persuade the Ministry of Health and Family Welfare (MoHFW) to take ownership of this excellent resource.

[68] https://www.unicef.org/rosa/reports/health-system-strengthening-transforming-health-information-system-bangladesh
[69] Interview with UNICEF Health Section

Worse, DHIS2 has become a victim of its own success, with health facilities' spiralling demand leading to critical overloading of the central server, which now needs urgent replacing.[70] Given the GoB's willingness to invest in IT, they should be urged to meet this cost urgently.

Recruitment of technical staff, particularly at the district level, is also badly needed. During the DHIS2 development phase, district health authorities were well-staffed, but numbers of data experts have dwindled and attempts to bring in technical expertise are often blocked by central government.[71] It is not clear whether this is for financial reasons or a further indication of the low priority currently given to data management. Without continued national investment in the development of DHIS2, there is a risk of different funders supporting competing systems. BCO should encourage GoB to recognise the value of DHIS2 and to provide the human and infrastructural resources to maintain its world-leading quality.

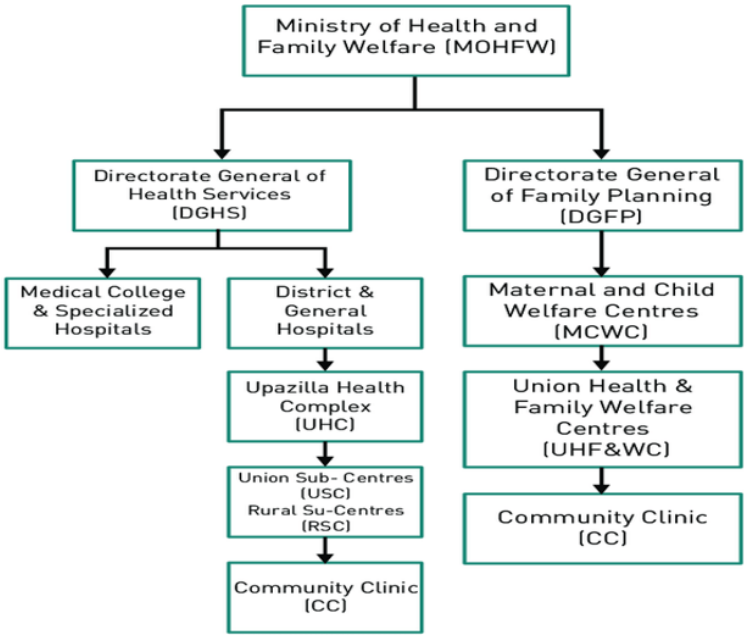
Further work is also needed to increase the use of local health data. The current DHIS2-based dashboard has lots of information, but it is not easy to navigate or search and almost impossible to use for data analysis[72]. There is a need for investment in user-centric interfaces to facilitate both wider inputting and easier use, and advocate for annual data training for all medical staff.

6.3 Duplication

In parallel to DHIS2, Bangladesh also operates the Family Planning Management Information System (FPMIS). This, in part, reflects the structural bifurcation within MOHFW, for long-standing historical reasons relating to the importance given to population management globally at the time of Bangladeshi independence. The Directorate General of Health Services (DGHS) and the Directorate General of Family Planning (DGFP) operate completely separately, as shown in Figure 4 below.

[70] Interview with Surgeon General's office, Cox's Bazar
[71] Interview with Civil Surgeon's office, Cox's Bazar
[72] http://103.247.238.81/webportal/pages/index.php

Figure 4: Ministry of Health and Family Welfare Organogram



USAID was instrumental in establishing FPIMS and remains its principal funder. Large amounts of data in FPIMS are the same, or similar, to that in DHIS2.[73] Moreover much of the data that is only held within one system is relevant to service providers in both. Indeed, many local clinic practitioners are responsible for both health and family welfare. Therefore, the existence of dual systems creates additional work and confusion, as well as wasting considerable resources. We recommend discussion between government and relevant development partners to rationalise the substantial duplication currently taking place between FPIMS and DHIS2. Given that DHIS2 is both more comprehensive and recognised globally as a successful system, it makes sense for data from FPIMS to be incorporated within it. This would involve sensitive and complex discussion with GoB, due to the bifurcated nature of the MoHFW.

6.4 Surveys

Health-related surveys are frequent. Between 2009 and 2019, thirteen major health-related surveys were conducted. Of these, BBS conducted four and NIPORT conducted nine.[74] 77 percent of health-related surveys depended on technical and financial support from eight unique international actors. USAID provided technical and financial assistance for 7 different NIPORT surveys. Yet, in their day-to-day work, surveys are not health officials' most important source of

[73] Interview with Civil Surgeon's office, Rangpur
[74] See appendix 2

information. For example, the Gaibandha Civil Surgeon told us: “whilst planning, we keep surveys in the back of our minds”.[75] There is a need for UNICEF to work with USAID and other development actors to rationalise the use of surveys, through collaboration in commissioning, and to orchestrate coordinated investment into the much more useful health management information system. The top priority is to develop training and technology to maintain the accuracy and reliability of data within DHIS2 – and to facilitate much easier use of data for planning and targeting interventions at district level and below.

[75] Interview with Civil Surgeon’s office, Gaibandha

7 Primary education data

School-age children face significant challenges relating to their right to high-quality education and protection. It is estimated that some 4.6 million children of primary-school age are out of school, most of them in urban slums and disaster-prone and hard-to-reach areas. Moreover, a recent survey estimated that 1.7 million children, mostly boys, are engaged in child labour, a quarter of them of primary school age (between 6 and 11).[76] Lack of safety and the high prevalence of sexual harassment and abuse in public places contribute to girls' dropout from schools. Most schools do not have functional gender- or disability-responsive water, sanitation and menstrual hygiene facilities.[77]

Bangladesh has separate ministries and data systems for primary and secondary education. Our research has focused wholly on primary schools. At that level, there are no comprehensive records of educational outputs and no meaningful measures of educational performance. Levels of digitisation are low. Registers are entirely paper based. As noted in the Common Country Assessment, "Weak data systems… is a critical issue affecting the education SDG" in Bangladesh. SDG4 has seven targets and eleven indicators for measuring achievement of those targets; Bangladesh only has readily available data for one indicator, while seven have partially available data and three have no data for monitoring and reporting.[78] The difficulties for UNICEF – and others – in seeking to achieve SDG targets in the absence of public monitoring data are well-recognized. In addition, over-centralization has led to weak governance, with poor accountability to pupils and parents and weak incentives for schools to focus on education quality or learning outcomes.

7.1 Annual Primary School Census

The Annual Primary School Census (APSC) has been conducted since 2005 and covers all state primary schools. The APSC is the only source of annual data on educational inputs. It does not measure learning outcomes. It was previously reported disaggregated to district level. In 2017 this stopped, and now only national figures are released. Information from the APSC is used by schools themselves for planning purposes, but there is currently no opportunity for district or upazila authorities to assess schools' relative performance (or even the relative quality of their data). Greater disaggregation and reliability of APSC data are high priorities.

[76] https://www.unicef.org/bangladesh/en/more-opportunities-early-learning/quality-continuity-primary-education
[77] [***]
[78] Data is available for indicator 4.2.2; the seven indicators with partial data are 4.1.1, 4.3.1, 4.4.1, 4.5.1, 4.a.1, 4.b.1 and 4.c.1 and the three indicators without data are 4.2.1, 4.6.1 and 4.7.1

One of the main obstacles to a reliable APSC – as well as to expanding its remit – is the perceived data illiteracy of most primary headteachers. Many currently resort to local commercial outlets to complete spreadsheets on their behalf – leading to multiple inputting errors. This is expected to change over the next five years as the next generation of more IT-literate teachers move through the ranks.[79]

The BCO has decided to focus its immediate investments in consolidating the APSC. Ensuring that it becomes a more robust foundation on which to build a more comprehensive education management information system (EMIS) is a sustainable approach.[80]

7.2 National Assessment Survey

Assessments of students' ability are also carried out annually, via random testing. A sample of 700 government primary schools nationally is used. According to the 2013 National Student Assessment (2013), only one in four children in grade 5 have the required competencies in mathematics and Bangla. However, the questions included in the National Assessment Survey are not based on the same curriculum that is taught in school, rendering them meaningless as a measure of the quality of education provision.[81] The small sample survey does not produce information about individual students' attainment or measure individual schools' performance over time.

7.3 School Registers

Schools maintain paper-based records containing teacher and student data. Each school keeps a minimum of 37 paper registers. Data sits in silos and nothing is aggregated because there is no central data coordination or source. Aggregating some of these – especially those focused on pupils, as opposed to infrastructure and resources – would be very useful. Education Officers visit schools and check registers once a year to ensure quality. They should also observe at least one class and mentor teachers, but this rarely happens.[82]

As mentioned above, UNICEF's support for the Annual School Census is seen as a steppingstone towards a more comprehensive EMIS. The next step should be to pilot the digitisation of pupil-focused school records, such as data on admissions, attendance and performance. This would help to create a stronger focus on outcomes as well as outputs. This should be backed up with investment in technical support for monitoring and evaluating academic standards. We

[79] Interview with UNICEF education specialist
[80] Interview with UNICEF education specialist
[81] Interview with UNICEF education specialist and upazila primary education officers, Cox's Bazar
[82] Interview with upazila primary education officers, Cox's Bazar

further recommend UNICEF to continue to support the primary education department to build the capacity of school and department staff to capture good quality data. This can be achieved by scaling up the kind of support offered through the School Effectiveness Programme.[83]

[83] https://www.unicef.org/bangladesh/en/more-opportunities-early-learning/quality-continuity-primary-education

8 Child protection data

8.1 Prevalence

Excluding UNICEF's own data, and that from UNICEF-supported surveys such as MICS, there is scant information on child welfare in Bangladesh. Such government data as there is, on child marriage, trafficking or violence against children (VAC), is non-disaggregated and politically sensitive. At the local and national levels, a lack of timely information on the effective coverage of social services affects the capacity of government to make informed policy decisions. USAID is currently running a pilot to capture data on child marriage at upazila level.[84]

MICS is the only survey conducted reasonably regularly and with a sample large enough to disaggregate statistics to district level, but it is not frequent enough to assess trends or programme impact. In addition, between 2009 and 2019, BBS conducted eight household surveys that provided at least some information on issues related to child welfare. The 2019 MICS findings suggest that not only is VAC extremely prevalent, but that there is widespread cultural approval of physical punishment.[85]

8.2 Case Management

In almost all of Bangladesh, child protection case management is entirely paper based. Data is collected manually by Community-Based Child Protection Committees (CBCPCs), with records kept at ward or upazila level. There are no attempts to aggregate child protection data, in order to support planning or policymaking.[86]

The exception is Cox's Bazar district, where the Child Protection Information Management System (CPIMS+) was deployed in 2018 to manage cases involving Rohingya children (see section 10 below). CPIMS+ data in Cox's Bazar is reliable. The content quality varies between implementing partners, with small local organisations struggling the most. Though it is a case management system, there are now enough records within CPIMS+ in the refugee camps – over 20,000 – that it could be used to analyse trends, drivers and even prevalence (though this is not yet being done). CPIMS+ is an effective system, fed by mobile data capture, that could be used to facilitate important sharing of information – for example between social services providers, police or schools – while protecting confidentiality.

[84] Interview with UNICEF child protection specialist
[85] Unpublished MICS 2019 findings
[86] Interview with UNICEF child protection specialist

GoB and UNICEF are in talks to scale up current CPIMS+ to the national level. The BCO has already discussed this possibility, but talks have stalled. If it were possible to persuade the Department of Social Welfare to introduce CPIMS+ nationwide, statistics derived from it would fill a critical gap – making it possible to devise interventions to help meet several SDG targets. Given the relatively low cost of mobile data capture, we recommend that UNICEF continues to advocate for the use of CPIMS+ in non-humanitarian settings, as a cost-effective path to digitizing the case management records of the CBCPCs. Funding one or more digital data capture pilots could create helpful evidence to support advocacy.

9 Data on climate change adaptation and disaster risk reduction

9.1 Vulnerabilities

Tropical cyclones have historically occurred almost annually in Bangladesh.[87] The World Bank reported that frequency increased in the years leading up to 2011,[88] and they are now expected to become heavier as well as more frequent.[89] An often quoted estimate suggests that severe cyclones make landfall once every three years.[90] However the Regional Specialized Meteorological Centre (in Delhi) found that up to 53 per cent of all tropical cyclones in Bangladesh are now severe. In other words, they occur approximately once every other year.[91] In 2019, two cyclones, Bulbul and Fani, were categorised as "extremely severe cyclonic storms". The cyclones are devastating because of the country's coastal morphology, proximity to the shallow and warm Bay of Bengal, topography and climate.[92] UNDP has ranked Bangladesh as "the most vulnerable of all the countries in the world to tropical cyclones."[93]

Floods also occur on an almost annual basis, between July and August. They often cover up to 25% of the country, and every 4-5 years can cover over 60% of the country. Floods are large because they originate from precipitation in the whole of the trans-boundary Ganges Brahmaputra Meghna basin, of which Bangladesh only constitutes 7% of the total area. In turn, 80% of Bangladesh's surface is a floodplain.[94] Therefore, Bangladesh is particularly vulnerable to flooding events. Moreover, floods are not always a direct result of precipitation. In north-western Bangladesh, they are also caused by water released from dam systems in India on an almost annual basis.[95] Phillip et al attribute the river flooding events of August 2017 – the worst in at least 40 years – to climate change.[9697] The Red Crescent predicts that floods will "not only be more frequent

[87] Netherlands Ministry of Foreign Affairs (2018). Climate change profile: Bangladesh.
[88] World Bank (2011). Vulnerability, Risk Reduction, and Adaptation to Climate Change: Bangladesh.
[89] International Federation of Red Cross and Red Crescent Societies (2019). Bangladesh: Cyclone Early Action Protocol Summary.
[90] Netherlands Ministry of Foreign Affairs (2018). Climate change profile: Bangladesh.
[91] International Federation of Red Cross and Red Crescent Societies (2019). Bangladesh: Cyclone Early Action Protocol Summary.
[92] Netherlands Ministry of Foreign Affairs (2018). Climate change profile: Bangladesh.
[93] Ibid.
[94] Ayers, J., Huq, S., Faisal, A. M., and Hussain, S., T. (2014). Mainstreaming climate change adaptation into development in Bangladesh. Climate and Development. 293-305.
[95] UNICEF Emergency Officer, UNICEF Rangpur Office. Interview date: 21.11.2019.
[96] Philip, S., Sparrow, S., Kew, S., van der Wiel, K., Wanders, N., Singh, R., Hassan, Khaled Mohammed, Hammad Javid, Karsten Haustein, Friederike E. L., Hirpa, O., Rimi, H., R., Saiful Islam, A., K., M., Wallom, D., C., H., and Jan van Oldenborgh, G. (2019). Attributing the 2017 Bangladesh floods from meteorological and hydrological perspectives. Hydrology and Earth System Sciences. 1409-1429.
[97] Note that melting glaciers in the Himalayas also increase the risk of extreme flooding events in Bangladesh, however, this specific cause is not a game changer because melt-waters merge with flows from the Ganges Brahmaputra Meghna basin.

and cover a larger area of land, but inundation depth will also increase significantly in most of the country."[98] Overall, Bangladesh has been ranked the 6th most affected country by human-induced climate change.[99] Its capacity to confront these difficult challenges is undermined by socio-economic factors such as high population density and poverty. In line with this, Bangladesh ranks as the 33rd most vulnerable country to the effects of climate change, and as the 25th "least ready."[100]

9.2 National Early Warning Systems

Early warning systems (EWSs) for tropical cyclones are operated by organisations internal to the Ministry of Defence (MoD), specifically the Space Research and Remote Sensing Organisation and the Bangladesh Meteorological Department's Storm Warning Centre. EWSs for flooding events are operated by the Ministry of Water Resources (MoWR)'s Flood Forecasting and Warning Centre (FFWC). These institutions and their systems are well-established and sophisticated. For instance, FFWC captures data continuously using satellite imagery, radar, sensors and various manual techniques from approximately 195 observation or forecast stations, that cover an area of 82,000 square kilometres and all major floodplains. Processing is completed in-house at the central level, and on an hourly or daily basis updated data is disseminated to the public via the FFWC's website, through mass media (newspaper, radio & television) and Interactive Voice Response. This requires local communities to anticipate risks and check the media to find out if any warnings are in place for their ward.

By contrast, regularly updated data is sent directly to official stakeholders in central government, including the PMO, MoWR, Ministry of Disaster Management and Relief (MoDMR) and Department of Disaster Management (DDM). In theory, District Disaster Management Committees (DMCs) and a limited number of Upazila committees (UzDMCs) are also contacted via email, fax and telephone.[101] However the national FFWC has very limited contact with most UzDMCs, reflecting the hierarchical structure – and upward-oriented flow of information – of all GoB institutions. Combined with outdated communication technology, this means that local planners do not receive the information they need in a timely way. For all the advanced predictive capacity at national levels, those responsible for implementing risk reduction measures are left dependent on listening to the radio at critical times. In addition to underdeveloped downstream pipelines, the different EWSs for cyclones and floods do not speak to each other horizontally, for instance, the FFWC does not send information

[98] International Federation of Red Cross and Red Crescent Societies (2019). Bangladesh: Cyclone Early Action Protocol Summary.
[99] Mechler, M., Bouwer, L., Schinko, T., Surminski, S. and Linnerooth-Bayer. (2018). Loss and Damage from Climate Change: Concepts, Methods and Policy Options.
[100] Netherlands Ministry of Foreign Affairs (2018). Climate change profile: Bangladesh.
[101] Government of Bangladesh. (2020). Accessed: http://www.ffwc.gov.bd/index.php/about-us/.

directly to the MoD, and there are no mechanisms to view collated information in one place. Typically, then, “many of the statistics that are needed to monitor the environment and to develop appropriate policies are not yet available.”[102]

9.3 Disaster Planning Architecture

The Bangladesh Climate Change Strategy and Action Plan (BCCSAP) was developed in 2004 and then, in 2015, integrated into the seventh five-year plan (2016-2020). Apart from research and knowledge management, there is barely a mention of data in the BCCSAP, suggesting it was not seen as strategically significant. The BCCSAP conceptualised climate change adaptation (CCA) and disaster risk reduction (DRR) as naturally convergent,[103] but created separate implementation channels – the Comprehensive Disaster Management Programme (CDMP) and Livelihood Adaptation to Climate Change (LACC), with limited provision for coordination between them. The CDMP is managed nationally by the DDM, while LACC falls under the Ministry of Environment and Forests.

DDM is housed within the Ministry of Disaster Management and Relief (MoDMR). The DDM manual contains organizational structures and strategies, but nothing on data. The structure is typically hierarchical and operates through strongly centralised mechanisms.[104] At the top sits the National Disaster Management Council (NDMC) which is chaired by the Prime Minister.[105] Below the NDMC are a series of Disaster Management Committees at the District, Upazila, Union and Pourashava levels. The Inter-Ministerial Disaster Management Coordination Committee (IMDMCC) sits below the NDMC and implements its policies, and the National Disaster Management Advisory Committee sits below the IMDMCC and assists it.[106] This rigid and unwieldy structure mitigates against innovation. For example, the large-scale Cyclone Preparedness Programme (CPP) has operated without modification since 1973, relying on megaphones, hand sirens, public address systems and door-knocking to spread warnings.[107] CPP does not base its plans on analysis of local data.

To add to the complexity and inefficiency, local and international NGOs offering support during crises do not liaise directly with DDM. Instead they are managed by the Bureau of NGO Affairs (BNGOA), which first advises NGOs to disseminate warning signals to communities, then directs them to assist DDMCs, UzDMCs and local administrations. This means that every local request – for damage and

[102] Ibid.
[103] FAO (2015). Evaluation of FAO’s contribution to Climate Change Adaptation and Mitigation; Final Report.
[104] Center for Excellence in Disaster Management and Humanitarian Assistance. (2017). Bangladesh: Disaster Management Reference Handbook.
[105] Carter, B., and Pozarny, P. (2016). National Disaster Management Authorities.
[106] Carter, B., and Pozarny, P. (2016). National Disaster Management Authorities.
[107] Cyclone Preparedness Programme. (2020). Cyclone Preparedness Programme. Accessed: http://cyclonepreparednessprogramme.blogspot.com/p/about-us.html.

needs assessments, evacuations, first aid, logistical support, or the distribution of microcredit or humanitarian goods – must go via BNGOA. BNGOA often fails to supply timely information to relevant NGOs.[108] BNGOA maintains a database of NGOs by geographical area but does not feed programme data from NGOs into other MISs.

9.4 DRR at the community level

Upazila Level Disaster Management Committees are meant to meet once a month and prepare a "Comprehensive Disaster Management Action Plan", including protocols for "rescue and primary relief operations, and the restoration of communication".[109] This could include identifying local priorities, such as vulnerable populations. In reality, however, most UzDMCs "conduct very little planning on a continuous basis" and lack both understanding of the value of data and data skills.[110] They tend to see their role as reactive. Yet, when disaster warnings are issued, UzDMCs are instantly disempowered, with a Local Disaster Incident Manager (LDIM) being centrally appointed to assume control of events.[111] Normally, the LDIM assembles a Local Disaster Management Team (LDMT) and supervises them while they carry out situational assessments, decide on strategies and plans, and disseminate information. Any policy the LDIM or LDMT make must be consistent with the NDMC's National Multi-Agency Disaster Incident System.[112] LDIMs are usually provided only with basic and general weather forecasts that are neither timely nor sufficiently disaggregated. Combined with the absence of reliable local plans or data on affected populations, this makes local evidence-based decision-making impossible.

Some ex-post data on disaster events is collected locally, to be passed upwards. UzDMCs are requested to complete paper-based "D Forms" during disaster and post-disaster periods. D Forms capture data on damaged infrastructure, such as bridges or school buildings.[113] D Forms are not compulsory, and "there are no data standards, reporting formats vary from district to district, and [UzDMCs] make the numbers up because there are no checks and balances."[114] There are paper-based archives – including lists of damage to infrastructure – that are kept at Upazila level. These could in theory be used to help plan risk reduction in relation to future events. However, they are riddled with serious reliability concerns and data gaps. Recently, D Forms were expanded to include information on affected populations, including women and children. This was a

[108] Center for Excellence in Disaster Management and Humanitarian Assistance. (2017). Bangladesh: Disaster Management Reference Handbook.
[109] Government of Bangladesh. (2020). Upazila Disaster Management Committee.
[110] UNICEF Emergency Officer, UNICEF Rangpur Office. Interview date: 21.11.2019.
[111] Center for Excellence in Disaster Management and Humanitarian Assistance. (2017). Bangladesh: Disaster Management Reference Handbook.
[112] Ibid.
[113] Note that studies show that children in Bangladesh children are more likely than adults to die or be injured during disasters. Beyond this fact details are unclear.
[114] UNICEF Emergency Officer, UNICEF Rangpur Office. Interview date: 21.11.2019.

welcome development. However archived data only covers infrastructure.[115] Weak leadership has led some practitioners to believe that the "Government does not seem to be interested in the data element of DRR."[116] UNICEF is supporting GoB in updating local data collection tools. This has led to some improvements in districts such as Chittagong, where the scale and frequency of climate-related humanitarian crises is very high. However, there is a need for nationwide systematic data training, as well as data access, at local levels.

In 2016, the Government of Bangladesh launched the Local Government Initiative on Climate Change (LoGIC) in partnership with the UNDP, UNCDF, EU and SIDA. Its objective was to improve inclusive local level planning to better manage the effects of climate change.[117] This was an excellent idea but, to be effective, it would have needed to focus on providing UzDMCs and ward committees with timely access to locally-specific weather information, to combine with their own knowledge of local populations and infrastructure. In fact, LoGIC barely mentions data, except when it calls for communities to "inform and advocate for evidence-based decision making at the national level",[118] again reinforcing the centralisation of both data and action based upon it. Far from enabling local communities, LoGIC seeks to centrally manage them. Moreover, the whole programme lasts for just four years, ending in June 2020. It is unlikely to have a beneficial impact on local disaster risk reduction capacity. There is a need for pilot programmes that focus on the rapid transfer of information from EWSs to UzDMCs – and local communities themselves – to enable local decision-making.

[115] Ibid
[116] Ibid.
[117] Government of Bangladesh and UNDP. (2016). Standard Joint Project Document: Local Government Initiative on Climate Change.
[118] Ibid, Activity 3.3

10 The role of data in the Rohingya refugee crisis

The World Humanitarian Summit (WHS) that took place in Istanbul in May 2016[119] identified "strengthening the humanitarian-development nexus" as a top priority. The summit's proposed "New Way of Working" (NWOW) as outlined in the UN Secretary-General's Report of the WHS[120] called on humanitarian and development actors to work collaboratively together, based on their comparative advantages, towards "collective outcomes" that reduce need, risk and vulnerability over multiple years.[121]. This included: reinforcing, not replacing, national and local systems; anticipating crises; and delivering collective outcomes that transcend humanitarian-development divides.[122]

One of the cornerstones of this approach is "a common understanding of risks, needs, gaps and existing capacities; achieved by sharing analysis and pooling relevant data"[123]

- Predictable and joint situation and problem analysis are needed to come to a joint problem statement and identify priorities based on the vast amount of reliable data that is being collected.[124]

Global progress in this regard has been slow. A review presented to the high-level meeting of the UN Joint Steering Committee to Advance Humanitarian and Development Collaboration in May 2019 concluded that:

- In many country settings there is no common cross-pillar platform to consolidate or even share relevant data and information for priority setting purposes or to review how planning and programming needs to be adjusted.[125]

The refugee crisis in Bangladesh's Cox's Bazar district is no exception. Collaboration between development and humanitarian actors has taken place to establish the physical infrastructures required to cope with a million refugees and

119 https://www.agendaforhumanity.org/summit
120 https://www.agendaforhumanity.org/sites/default/files/A-71-353%20-%20SG%20Report%20on%20the%20Outcome%20of%20the%20WHS.pdf
121 https://www.un.org/jsc/content/new-way-working
122 Ibid
123 Better Humanitarian-Development Cooperation for Sustainable Results on the Ground:
A think piece drawing on collaboration between OCHA, UNDP, UNHCR, UNICEF, WFP, and the World Bank, supported by the Center on International Cooperation.
https://interagencystandingcommittee.org/system/files/final_whs_hdag_thinkpiece_june_14_2016.pdf
124 https://www.agendaforhumanity.org/sites/default/files/20170228%20NWoW%2013%20high%20res.pdf
125 JSC reviews : synthesis of findings and recommendations, May 2019
https://www.un.org/jsc/sites/www.un.org.jsc/files/general/jsc_review_synthesis_and_recommendations_0.pdf

respond to flooding. Joined-up data and analysis supporting these operations is less forthcoming.

10.1 Political factors

There are several overriding political factors that have hindered the development of a joined-up data ecosystem in Cox's Bazar.

First, the government does not recognise the Rohingya as refugees and consequently does not afford them the rights normally offered by a host nation. Restricting internet access[126], fencing camps[127], sharing identity details with the government whence they fled[128] and refusing education in their own language[129] are all symptoms of this situation.

Second, while it is recognised that the influx of refugees impacts on the whole of Cox's Bazar district[130], under 15% of the local population are defined as host communities[131]. While those living near the camps are undoubtedly in most need, this narrow definition of the host community has led to a lack of integration between the district government and humanitarian operations.[132]

Third, the Bangladesh government's choice of the International Organisation for Migration (IOM) rather than the UNHCR to lead relief operations in 2017 – related to their insistence that the Rohingya in Bangladesh are migrants, not refugees – exacerbated tensions between the two agencies. According to a report at the time "Several senior observers, speaking on condition of anonymity, told IRIN the policy has led to wasteful friction between IOM and UNHCR, and a weakening of the UN's ability to effectively protect Rohingya refugees' rights."[133] This friction has led to the apparent failure of the Inter Sector Coordination Group (ISCG) to establish properly functioning evidence-informed decision-making ecosystems.[134]

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[126] https://www.thedailystar.net/rohingya-crisis/news/3g-4g-services-restricted-ukhia-teknaf-until-further-notice-1798249
[127] https://www.hrw.org/news/2019/11/26/bangladesh-turning-refugee-camps-open-air-prisons
[128] See section on CRVS and legal identity below
[129] See section on Education below
[130] Support to Bangladesh Host Communities and Institutions in the Joint Response Plan , May 2018 https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20180526_host_communities.pdf
[131] The 2019 Joint Response Plan includes 335,900 host population. The 2011 Census records the population of Cox's Bazar as 2,289,990.
[132] Interviews with UNICEF officer in Dhaka and with Deputy Director Local Government in Cox's Bazar
[133] http://www.thenewhumanitarian.org/news/2017/10/23/bangladesh-resists-greater-unhcr-role-rohingya-crisis
[134] This opinion was expressed separately by three UNICEF officers in Cox's Bazar, all of whom requested anonymity. These views were expressed primarily in relation to data consolidation, not broader policy, planning, programming, financing, M&E issues.

10.2 Data governance and coordination

The ISCG is responsible for operational – and data – coordination. The main activities of its Information Management and Assessment Working Group are focussed on data collection – such as the Multi-Sector Needs Assessment survey and the 4W contact list – rather than the consolidation of data collected by the government and other agencies.[135]

The ISCG has ensured that all agencies employ the same geospatial framework.[136] Child protection case management is the one success story with all implementing agencies involved adopting CPIMS+. Over 20,000 cases have been logged into the central server.[137]

Beyond this, however, little coordination has taken place. The UNICEF field office has developed its own planning and monitoring system for its implementing organisations to report progress, but UNHCR and IOM systems are less developed and there is no coordination of such data between the three lead agencies.[138] At one point refugee population estimates from IOM and UNHCR differed in the region of 300,000.[139] While the reasons for this discrepancy are not known, it does point to a lack of data cooperation between the two agencies.

10.3 CRVS and legal identity

Under the Births and Deaths Registration Act, 2004, all births and deaths – of "any Bangladeshi or any foreigner living in Bangladesh and also any refugee taking shelter in Bangladesh" – must be registered.[140] A birth certificate is required for the issuance of a national identity card, driving licence or passport as well as for the registration of marriage and school admission. Yet, in August 2017, the government shut down all birth registration in Cox's Bazar district in response to the refugee crisis.[141] This included ceasing registration of indigenous Bangladeshi births, outside the camps, in the district. Since September 2019 there have been reports that the service would be reopened but as of January 2020 this had not happened.[142]

The Bangladesh Government and UNHCR had, by January 2020, issued biometric identity cards to over 800,000 refugees.[143] However, the data captured

[135] CXB IMWG latest assessments and documents - https://www.humanitarianresponse.info/en/operations/bangladesh/inter-sector-information-management-isimg
[136] https://data.humdata.org/dataset/cox-s-bazar-common-facility-mapping-dataset
[137] Interview with UNICEF PMR team, Cox's Bazar
[138] Interview with UNICEF information manager, Cox's Bazar
[139] Interview with Assistant Refugee Relief and Repatriation Commissioner, Cox's Bazar
[140] https://www.bhcanberra.com/sites/default/files/Birth%20and%20Death%20Registration%20Act%202004.pdf
[141] https://www.thedailystar.net/country/high-court-issues-rule-resuming-birth-registration-in-coxs-bazar-1823533
[142] https://tbsnews.net/bangladesh/birth-registration-coxs-bazar-restart-soon
[143] https://reliefweb.int/report/bangladesh/unhcr-bangladesh-operational-update-1-31-december-2019

in the registration process follows Myanmar, not Bangladeshi standards[144], and by July 2019 the government had handed over a list of over 55,000 names[145], including identity details[146], from the system to the Myanmar government.

10.4 Health and Education

While the national Health Management Information System (DHIS2) is deployed in the refugee camps it uses a bespoke data collection template markedly different from the local system.[147] According to the 2019 Joint Response Plan, "existing information management systems need to be evaluated and streamlined for improved monitoring."[148]

The World Health Organisation (WHO) has deployed its Early Warning, Alert and Response System (EWARS)[149] which duplicates the DHIS2 data.[150] A 2017 WHO-led study recommended that DHIS2 is not suitable for humanitarian operations as it is dependent on national ICT infrastructures and expertise.[151]

The government does not provide any education in the refugee camps, bars humanitarian agencies from providing Rohingya children with any formal, accredited qualifications and bars Rohingya children from enrolling in schools in local communities or taking national school examinations. Learning centres are prohibited from teaching Rohingya children Bangla, which is closer to the refugees' own language than Burmese, which they are instead required to learn.[152]

10.5 Prospects for a data nexus

Our consultant spent only two days in Cox's Bazar and was unable to meet with IOM, UNHCR or the ISCG[153]. Nevertheless, the evidence presented above, supported by the genuine concern expressed confidentially by several UNICEF staff, gives us enough confidence to draw the following conclusions.

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[144] Interview with UNICEF officer, Cox's Bazar
[145] https://www.dhakatribune.com/bangladesh/rohingya-crisis/2019/07/29/bangladesh-hands-over-fresh-list-of-25-000-rohingyas-to-myanmar
[146] https://twitter.com/ArnelCapili/status/1155764445462716416
[147] Interview with Surgeon General's office, Cox's Bazar
[148] http://reporting.unhcr.org/sites/default/files/2019%20JRP%20for%20Rohingya%20Humanitarian%20Crisis%20%28February%202019%29.comp_.pdf
[149] https://www.who.int/emergencies/surveillance/early-warning-alert-and-response-system-ewars/
[150] Interview with Surgeon General's office, Cox's Bazar. Work was planned to integrate DHIS2 and EWARS but there is currently no evidence of progress.
[151] Standards for Public Health Information Services in Activated Health Clusters and other Humanitarian Health Coordination Mechanisms. https://www.who.int/health-cluster/resources/publications/PHIS-standards-May2017.pdf
[152] https://www.hrw.org/report/2019/12/03/are-we-not-human/denial-education-rohingya-refugee-children-bangladesh
[153] Meetings had been planned but did not take place due to more pressing commitments that arose for the officials approached by the UNICEF field office.

First, and perhaps understandably, data coordination is not considered a priority as agencies are busy getting on with the business of saving and protecting lives.[154]

Second, the political difference between the government and the humanitarian agencies over the status of the Rohingya people in Bangladesh stands in the way of a shared medium-term approach.

Third, the competition and lack of any mature collaboration between UN agencies stands in the way of the anticipated 'cross-pillar' platforms. This is not confined to the humanitarian context but is reflected in the lack of real collaboration within the UN Data Group, as outlined above.

The solution is thus political and not technical. As only the third-most influential operational agency in Cox's Bazar, UNICEF's capacity to make a difference locally may be limited. In Dhaka this is not the case. The data element of the humanitarian-development nexus is perhaps best served by renewed attempts by UNICEF to take a leadership role in tackling donor harmonisation and inter-agency coordination in Bangladesh as a whole.

[154] This view was also implicit in a brief interview with the most senior UNICEF official met at the field office.

11 WASH Data

Access to safe drinking water remains a challenge in Bangladesh. Drinking water is supplied by over 10 million separate bore holes and tube wells.[155] It is no wonder there are challenges in managing a database that monitors their status, or what proportion of the population have easy and free access to them. Many wells do not contain safely potable water, and many people drink water from other sources, which are often contaminated. It has been estimated that 41 per cent of the population drink water from sources with faecal contamination. In addition, Bangladesh is the most vulnerable country in the world to arsenic poisoning. Up to 80 percent of public wells are contaminated with arsenic to varying levels. An estimated 25 per cent of the population drink water with a level of arsenic above international maximum standards. Statistics suggest that over 3,000 people a year die from arsenic poisoning. This number has been falling since the late 1980s.[156]

The quality of public water is not tested frequently, and the results are not reliable.[157] The last baseline survey on the quality of drinking water was as long ago as 2003. Data was collected manually and entered into Excel at a later date. There is limited political will to collect data on water quality in Bangladesh, because major contaminants come from the country's most important industries, such as textiles and chemical manufacturing. UNICEF supports the government in developing a water quality data management system, with the objective of building the capacity of national and local institutions for water quality testing and strengthening the regulatory role of the government. At present all data collection continues to be done manually, and there are limited computer facilities available at upazila level.[158]

Only 61 per cent of the population use an improved toilet facility and 59 per cent have a specific place for handwashing equipped with soap and water. Data on safely managed sanitation, including emptying, transport and proper treatment, are lacking. UNICEF is involved in designing innovative water facilities and treatment technologies, as well as rural and urban piped water systems.

There is a need for substantial investment in the development of a management information system for WASH, supplemented by continued capacity training for district-level WASH staff in digital data capture, analysis and use. There is also a need for advocacy for government investment in arsenic-testing equipment in all districts, and much stronger enforcement of existing regulations requiring

[155] Interview with UNICEF WASH specialist
[156] Arsenic mitigation in Bangladesh
https://pdfs.semanticscholar.org/7761/97a200cca9c8645005064fca99a9a8c63e05.pdf
[157] Interview with UNICEF WASH specialist
[158] Interview with WASH officer, Rangpur

contractors to ensure – and provide information on – the quality of water from new tube wells.

12 Nutrition Data

Despite being a priority area for the GoB, data on nutrition is of poor quality. Publicly available information on all measures is scarce, unreliable and rarely disaggregated. According to the latest Global Nutrition Report, Bangladesh is on course to meet global targets for under-five overweight and under-five stunting, but is off course to meet the targets for all other indicators analysed with adequate data.[159] Alongside poverty, the leading causes of child undernutrition in Bangladesh include poor sanitation and hygiene, and gender inequality in decision-making related to household production and consumption.[160]

Fields for nutrition data are included within DHIS2, making it relatively straightforward to input at community clinic level. This has increased the availability of nutrition data, although only data on those attending public clinics can be captured. This means that most of the information gathered relates to maternal nutrition. There have been attempts to pilot mobile data capture outside clinics, using RapidPro.[161] This has been designed to respond to patient demand, which restricts it to parents (mothers) who are literate enough to make written requests. There have also been cases of demand not being responded to, creating trust issues.

While overall coverage has increased, however, data quality has declined. Many community clinics simply do not have the capacity to collect and enter reliable information on nutrition.[162] Clinics do not have dedicated nutrition officers, so data capture is left to nurses – in spite of the fact that key indicators such as severe acute malnutrition are difficult to measure and record. Nutrition data is supposed to be quality checked (alongside all DHIS2 data) at division level, but the side-lining and non-replacement of statisticians has affected compliance.[163]

As a result, policymakers in government (and other agencies, including UNICEF) still rely heavily on nutrition information gathered by MICS and the BDHS. It is probable that government spending allocations – within a tight budget, with only 2% allocated for nutrition programmes – are not based on data. At lower levels, user capacity is as low as it is for data capture, for the same reason – the absence of trained data staff. In response to this challenge, UNICEF and GoB have successfully piloted the appointment of a district Nutrition Data Officer in 25 districts. The government has now integrated this into their policy and is taking

[159] Global Nutrition Report, 2019, Country Overview
[160] Bangladesh: Nutrition Country Report, 2018, USAID
[161] Interview with UNICEF Nutrition specialist
[162] Interview with UNICEF nutrition officer, Rangpur
[163] Ibid

over training, but it is expected to take three to four years to get staffing levels up.[164]

UNICEF's focus on improving the reliability of data capture is appropriate. We recommend continued advocacy for adequate staffing levels for statisticians and data-trained staff, as well as further pilots of mobile nutrition data capture, including mobile phone apps. Simplifying the DHIS2 interface and upgrading its server would facilitate greater use. In the immediate term, a new BDHS survey would help to ensure that current nutrition programmes are evidence-based.

[164] Interview with UNICEF Nutrition specialist

13 Data demand and use

The government's investment in ICT infrastructure – started over a decade ago – has not created a culture of data openness, let alone use. Communities are not currently seeking to hold government to account, officials at all levels are strangers to evidence-based decision-making and no-one is trying to collaborate across sectors. Low demand contributes to data's poor quality and inaccessibility and, conversely, data's poor quality, sparseness, and inaccessibility are reasons why demand for it remains low. Nonetheless, there is an opportunity to persuade a relatively tech-savvy government and population to make a start. Demand can, to a certain extent, be stimulated by improving the quantity and quality of analysis and access to its findings. In turn, demand for useful data will incentivise improvements in quality, reliability, completeness, timeliness and accessibility. A central problem is the shortage of technical staff at both national and local levels. The Bangladesh Bureau of Statistics is currently 30% understaffed[165] – despite the availability of plentiful IT-skills in the labour market. As a result, there are still multiple gaps in digital data – for example all police and justice records are still wholly paper-based.[166]

It would make Digital Bangladesh a much more useful resource if it moved beyond e-government services and started to focus on making organised data available to inform people, at all levels. Information can both facilitate better-directed local programming by officials; and encourage local communities to make comparisons, identify gaps in service provision and demand better – thus holding government to account. This requires investment in improving the presentation and visualisation of good public data via more and better dashboards. In the first instance, it would help to make the existing health dashboard[167] more user-friendly, with easy to follow analysis and examples. Dashboards can only be developed if they are fed by reliable management information systems in all sectors. If these are built simultaneously – or sequentially – as part of a systematic programme of central government investment, it will also be possible to make them interoperable from the start. Being able to cross-reference data across systems is exceptionally useful for policymakers. For example, links can be made between health or child protection issues and poor learning – both at the individual case management level and in terms of district or national trends.

[165] Interview with former Director General of BBS
[166] Interview with UNICEF child protection specialist
[167] http://103.247.238.81/webportal/pages/index.php

13.1 Data Relevance

Bangladesh's data ecosystem is skewed towards monitoring progress at the national and divisional levels. Information that would be useful for planning, as opposed to monitoring, is relatively rarely gathered. BBS only publish paper reports containing statistics disaggregated to the divisional level, despite upazila level disaggregation being possible in some cases. As a result, officials at district, upazila and union levels have very little to work with. Several of the large sample surveys could be disaggregated beyond the levels they currently are. Three surveys in the last ten years had sample sizes large enough – at over 290,000 households – for Upazila level disaggregation. These are the Sample Vital Registration System (collected annually); the Coverage of Basic Social Services Survey (now biannual); and the Maternal Mortality and Health Care Survey.[168]

13.2 Data Access

Digital Bangladesh has both generated and met demand for digital access to government services. The GoB's open data portal provides an impressive array of national level statistics. However, neither provides public access to raw, searchable data. The information that does exist digitally is not accessible in disaggregated or easy-to-use formats. Communities and local service providers cannot find information relevant to their own local circumstances. At the moment relatively small amounts of data are available in user-friendly formats. Even the exemplary DHIS2 dashboard is complicated to navigate and incomplete.

Public access to survey data is poor. UNFP describes a "firewall between data producers and users" and calls on BBS to release sub-sets of disaggregated data, alongside "readily accessible and up-to-date documentation on data sources, compilation methods, statistical techniques, etc to allow for a better understanding of the data best practices."[169] In the first instance, information disaggregated to upazila level needs to be made available for building dashboards for local users. There is an opportunity for both BBS and A2i to be supported to provide a usable interface for this data at both district and Upazila level. MICS data should also be made available at district level. A2i are still developing analysis tools for public data sources like the Government Open Data Portal and SDG Tracker.

Information in the SDG tracker is organized according to administrative units – divisions, districts, upazilas and wards – that do not map neatly onto parliamentary constituencies. However, an interoperable constituency level data portal is also currently being developed by A2i at the request of the Prime

[168] See Appendix 2
[169] UNFP "Chapeau"

Minister's Office[170]. This is at an early stage – SDG information is not yet broken down according to constituency boundaries, and the dataset is restricted to SDG National Priority Indicators. Only some information will become public because it is intended as a surveillance tool for executive power to keep a check on parliament. However, it represents an excellent opportunity. Constituency-specific web pages could ultimately include information from administrative data sources too. This would serve not only to make it possible for party leaders – or constituents – to hold Members of Parliament (MPs) to account, but also vice versa.

Given that most decisions affecting local development outcomes are taken by central government, available data would give individual MPs the opportunity to demand more and better-directed investment from their political masters. In many countries – including several poorer than Bangladesh – MPs perceive their prospects of re-election to be directly related to their capacity to persuade central government to invest in their area. Whether or not this is true in Bangladesh, increased data-driven downward accountability can only be a good thing. In the first instance, identifying data-savvy MPs – and persuading them of the benefits that locally-available data on local service provision and need would bring to them personally – could be a powerful way for BCO to stimulate demand for data.

13.3 Popularising data

At the household level, and regardless of age group, socio-economic group, or location, mobile phones are the most popular form of mass media. 95% of households have access to one. Only one third are internet enabled. Television is the second most popular form of mass media. Approximately half of all households in Bangladesh have televisions.

Informed, data-savvy journalism is an essential link between data availability and government accountability for service-provision. It can also be a key stimulus to demand more accessible data itself. Training new or existing journalists to search for and analyse data can therefore create significant multiplier effects. We therefore recommend BCO to explore the possibility of funding data journalism posts or training bursaries within existing media outlets. While government officials may be influenced by established newspapers, the greatest public reach will most likely be achieved via television or through online news sites. It is essential that these are Bangladesh-specific media. Too often, internationally funded investments in data journalism have ended up supplying information only to international media houses. That would not be an effective way to stimulate data demand in Bangladesh.

[170] http://sdg.gov.bd/dv/chart/2

There is a general need to build public and official respect for data – and recognition of how it can help. We recommend that UNICEF adopt a multi-faceted strategy to make the case for the usefulness of data. This could include:

- Communications specialists exploring ways to run a social media campaign to engage government, private sector and civil society on the opportunities that accessible data can bring to better policymaking. Findings from the 2019 MICS show that mobile phones are the most popular forms of media in Bangladesh, while radio and newspapers are not widely used.
- Developing data-fed mobile phone apps with information that people will find useful, following the example of the existing app to read air pollution levels in Dhaka.
- Supporting national and district-level data forums that showcase the value of administrative data for analysis, planning and policy-making – including the benefits of both institutional and system interoperability.
- Identifying data-friendly politicians and officials, promoting them as "Champions" and providing them with resources and advice. Encouraging BBS to release more disaggregated data with up-to-date documentation on data sources to enable researchers to conduct their own analysis and provide feedback on best practices.

Additionally, UNICEF can help to start the process of changing culture by identifying and supporting potential partners. We recommend that BCO carry out a mapping of data-savvy organizations and opportunities and start to build partnerships. In particular, there is a need to find ways to increase collaboration with A2i on a range of issues.

14 Collaboration and coordination

14.1 Data Duplication

Bangladesh has many development actors – including government agencies, NGOs, bilateral and multilateral agencies. Most of these recognise the importance of information technology and play a role in commissioning or collecting data. Yet resources are wasted because information about the same things are collected in a number of surveys and administrative data systems. In other words, a large amount of duplications occurs. At the same time there are many data gaps. There is an urgent need for rationalisation of priorities. A draft UNFP document highlights the problem in relevant areas: “There are multiple sources of data covering the same indicators, such as maternal mortality and fertility rates… There are enormous challenges in collection, analysis, disaggregation, and dissemination of data. The Government needs to build collaboration at bilateral, regional and global levels for capacity building and sharing of information… Integration and harmonization of different demographic surveys like – BDHS, SVRS, BMSS, Census, and Long Questionnaire Survey etc. are very important.”[171]

We concur that the plethora of surveys collecting data on the same or similar indicators is a major problem in Bangladesh. For example, statistics for the indicator “skilled attendance at birth” are collected repeatedly by: BBS (supported by UNICEF) in the Sample Vital Registration System (SVRS), the Coverage of Basic Social Services Survey (CBSS), the Demographic and Health Survey (DHS), and the Multiple Indicator Cluster Survey (MICS). In addition, NIPORT (supported by USAID) collects the same information in the Maternal Mortality and Health Care Survey (MMHCS) and the Utilization of Essential Service Delivery Survey (UESD). This datapoint is also captured from community clinics in local administrative data twice: both in DHIS2 and DGFPMIS.

14.2 Rivalry between government agencies

Bangladesh’s domestic data landscape is characterised by competition instead of cooperation; with frequent duplication of survey content, overlapping information systems, ministerial rivalries, and an almost complete absence of data sharing or system interoperability. This all exacerbates the government’s over-centralised decision-making structures, with local governments disempowered and starved of information, and its undermining of its own Bangladesh Bureau of Statistics (BBS). Under the current Statistics Act, BBS is the only government agency mandated to produce and disseminate national statistics. It should therefore be

[171] Unpublished UNFP draft Chapeau

able to demand data from ministries and other agencies, be the primary data collection agency in all sectors, and set the agenda for the development of data systems. In reality – as in many countries – it suffers from data not being seen as a political priority. BBS is under-recognised and currently has a 30% shortfall in staffing, due to under-funding and other administrative obstacles to recruitment. As a result, it has weak capacity to fulfil its mandate under the Act and is vulnerable to competition from new agencies and ministries' own monitoring departments. For example, although it has seconded a statistician to each line ministry, the BBS does not see the oversight of administrative data standards as part of its current responsibilities.

In particular, the existence of separate demographic data agencies, such as NIPORT, serves to undermine the Bangladesh Bureau of Statistics and creates confusion. Between 2009 and 2019 BBS conducted 32 major household surveys. and NIPORT conducted 7. BBS is UNICEF backed. NIPORT is USAID backed. UNICEF does not collaborate with NIPORT in a technical or financial capacity. USAID does not collaborate with BBS in a financial or technical capacity. In addition, BBS is currently somewhat overshadowed by A2i, with its close relationship with the PMO. As an agile, technology-driven organization, A2i is culturally very different from the more traditional BBS. It also has a clearer vision on the importance of open data, visualisation and information systems, whereas BBS is more focused on the production of statistics. As such, we recommend BCO to continue to encourage collaboration and coordination between A2i and BSS, as their strengths are complementary. This could be done through the National Data Coordination Committee (NDCC), whose primary responsibility is "to promote the flow of information towards BBS". To date it has not done this effectively. However, it is currently focusing on providing support and advice to BBS on the SDGs – the greatest area of overlap between the work of A2i and BBS. We recommend UNICEF undertakes advocacy to strengthen the powers of the NDCC, so it can make binding decisions on all data matters – and drive cross-government commitments. This would also help to bolster BSS.

Donors often tend to exacerbate statistical agencies' problems by commissioning endless surveys – which an underfunded BBS cannot afford to turn down – rather than giving it space to develop and implement a strategic vision. BBS staff often see development partners – including UNICEF – as sources of funds, rather than as strategic partners. We believe that BCO – and the whole UN data group – should seek to change this, for example, by:

- Advocating for greater core funding and independence for BBS during engagement with other parts of the GoB
- Investing directly in capacity-building
- Publicly treating BBS with the respect its legal status merits.

14.3 A unified national indicator framework

In order to provide clear and consistent data that is easy to use and supports the delivery of the SDGs, it is essential that agreed standard data indicators and terms are consistently used to mean the same things. Currently, the alphabet soup of never-ending surveys in Bangladesh is exacerbated by their use of different indicators, making them almost impossible to compare or triangulate. For example, if one survey defines “early years” to mean ages 0-2 and another to mean ages 1-4, they will be measuring almost completely different things and generating confusion about the term. The situation is particularly bad when seeking to compare information from donor-funded surveys with administrative data. The government has started to try and address inconsistencies within administrative data – for example recently drafting a document setting out the ‘Health Informatics Standards & Data Structure for Bangladesh’.[172] However, current lists of indicators include hundreds that are never used, making them unwieldy.

We recommend BCO to encourage – and consider investing in – a joint effort between BBS and A2i to build an authoritative and comprehensive Data Dictionary. This would require a full survey of current use and an assessment of what is useful. It is likely also to involve some negotiation between those currently using conflicting indicators. For the reasons set out above, we recommend making BBS the lead agency, but it would need to bring in others to collaborate, including those with greater expertise in improving administrative data systems.

14.4 Development partner coordination

As seen in section 6 on Health data, disengagement between donors exacerbates, if not drives, duplication problems. For example, similarities between the UNICEF-backed DHIS2 and USAD-backed DGFPMIS create significant overlaps, yet the two systems are not interoperable.

Development Partners’ Forum

Most countries have a formally constituted Development Partners Forum (DPF) that meets regularly, creating the opportunity to set up a sub-committee to focus on data strategy. In Bangladesh, DPF meetings only take place on an ad hoc basis. This makes it difficult to facilitate focused and sustainable coordination. This lack of regular coordination is particularly noticeable in the financing of data infrastructures. We therefore recommend setting up a stand-alone development partner working group to harmonise data investments and activities. This would establish an appropriate setting, for example, for UNICEF to discuss merging

172 https://dghs.gov.bd/licts_file/images/eHealth/Standards%20and%20interoperability%20document%20draft.pdf

DGFPIMS into DHIS2. It would also facilitate collaboration on surveys, to prevent the kind of waste of resources seen in 2017, when BCO commissioned an expensive CBSS survey shortly after USAID had produced a similar one the year before.

UN Data Group

By contrast, unlike many countries, a UN data group exists in Bangladesh and meets regularly. However, it takes the form of a talking shop, where agencies take it in turn to "show and tell" their latest projects. This, at best, adds limited value and, at worst, serves to accentuate an atmosphere of competitiveness rather than sharing. The group recently sought to agree a Memorandum of Understanding (MoU) with the government on data issues, but this initiative failed – suggesting a lack of effectiveness and focus. After ten years of "One UN", there is limited evidence of real collaboration between UN agencies in Bangladesh – and still less donor harmonisation or collective strategic planning in the field of data.

Various UN agencies have long-standing relationships with BBS (UNICEF in particular), NIPORT and other data-generating bodies. As UNFP has argued, "In the SDG era, it is imperative to develop a coherent approach to strengthening national statistical capacity to meet SDG data needs and fostering national accountability that leaves no one behind."[173] These are fine words, but a meaningful structure is required in order to develop and implement a collective data strategy. We therefore recommend that UNICEF should lead a transformation of the data group, so that it focuses on:

- Collective identification of priority data and system gaps
- Agreeing ideal solutions
- Co-ordination of investment decisions to match need
- Strengthening administrative data systems
- Collaboration on survey design to meet multiple agency – and government – strategic needs.

A functioning UN data group could then:

- Become a leader in wider donor harmonisation
- Initiate meaningful collaboration with GoB, including joint investment in pan-sectoral systems
- Seek to empower BBS – in part by taking a systematic approach to commissioning (instead of overloading them with repetitious surveys)
- Support capacity-building of BBS staff.

[173] UNFP, Chapeau

Mainstreaming data strategy

The most recent UN Development Assistance Framework document is thin on data issues. Similarly, data is scarcely mentioned in the government's current Seventh Plan. We recommend that UNICEF should advocate for separate sections on data strategy within the next versions of both. The aim should be data good enough to enable evidence-based decision-making, both nationally and locally, that will help to achieve the Sustainable Development Goals. The data strategies outlined should therefore set out roadmaps to facilitate sustainable data infrastructures and encourage data-driven governance.

14.5 Interoperability

Data is much more useful for decision-making when it is possible to see the whole picture. Cross-sectoral analysis and interfaces can enable prioritisation or understanding of how issues in one sector affect others. Making this kind of contextualised information available would be the best way to incentivise officials and politicians to use data more. There is a general lack of data interoperability between government institutions in Bangladesh, and even between systems within ministries. At every level, departments operate within silos, with limited contact with each other, let alone sharing of data. In the longer-term, government departments need to build connectivity and compatibility into their databases so that links between them can be made wherever applicable**.** This is not impossible, especially as the influential A2i has committed to joining up data across sectors.

In the shorter-term, however, the most effective way to encourage interoperability is to facilitate simultaneous access to information from different sources, at local levels. One very useful, UNICEF-supported, pilot initiative seeking to do this involves the creation of Results Monitoring Units (RMUs) in two upazilas of Gaibandha district in Rangpur Division. Initiated in June 2018, RMUs are being developed as systematic platforms for different social service providers, with the aim to enhance analytical capacity and evidence generation. This will enable the Deputy Commissioner (DC) to monitor outputs and outcomes cross-sectorally, take remedial action where provision does not match demand, or take steps to increase uptake where demand does not match supply. If successful, these pilots could prove to be an important strategic step towards a more decentralized structure for data use and the establishment of a culture of results-based management.[174]

[174] Interviews with UNICEF staff, Rangpur

The RMU's Results Monitoring Task Force (with 18 members, chaired by the DC) meets bi-monthly to discuss the progress of different projects, with a focus on bottlenecks and potential synergies. This is good practice. Eighteen is a large group, but as the task force effectively replaces the District Coordination Committee, which has over 100 members, it represents progress. In principle, it will be able to plan across the board, and to identify which combination of services is most effective at delivering results and achieving SDG targets among different groups (including children, women and adolescents). However, as yet, there is not enough information available in them to be useful. The critical post of Results Monitoring Expert – a district-level data specialist to oversee the pilot – remains unfilled.[175]

If UNICEF can push for someone to be appointed promptly – and then for the mainstreaming of the position into the civil service hierarchy, this governance model offers an opportunity to institutionalise proactive results monitoring and data use in local governments. Once districts realize the importance of this model, they could make a case for its mainstreaming within the central government administrative hierarchy, a possibility that would improve value for money in service delivery. We further recommend that BCO should work with A2i to build a functional cross-sector district dashboard for the RMU pilots. More generally, we recommend exploring how to build pilot cross-sectoral dashboards generically at district level – in other words both as part of the RMU pilot and more generally.

As discussed in section 13 above, Members of Parliament have strong incentives to become users of data pertaining to their constituencies, especially now that A2i has taken the first steps to map progress against SDG targets by constituency. We recommend BCO to support A2i to build on its initial work by providing joined-up disaggregated data, tailored for MPs. This would enable MPs to take a proactive role in holding both national and local government to account. It would also allow communities to see how well their MP is doing, relative to other areas.

[175] Ibid

15 Appendices

15.1 Appendix One: Key Informant Interviews

17-Nov	UNICEF Deputy Representative
17-Nov	UNICEF Field Service Section
17-Nov	UN Data Group
18-Nov	UNICEF Health Section
19-Nov	Ex-Director-General of BBS
19-Nov	Chief of UNICEF Field Office, Rangpur
19-Nov	UNICEF Child Protection Officer, Rangpur
19-Nov	Deputy Director, Secondary Education, Rangpur Division
20-Nov	Deputy Commissioner/DDLG, Gaibandha
20-Nov	Civil Surgeon, Gaibandha
20-Nov	Deputy Director, BBS, Rangpur
20-Nov	DD-Social Welfare, Gaibandha
20-Nov	Deputy Director, Family Planning, Gaibandha
20-Nov	Women and Child Affairs officer, Gaibandha.
20-Nov	Chief of UNICEF Field Office, Cox's Bazar
20-Nov	Deputy Director Local Government (DDLG), Cox's Bazar
20-Nov	Assistant Refugee Relief and Repatriation Commissioner, Cox's Bazar
20-Nov	Upazila Primary Education Dept, Cox's Bazar
20-Nov	Civil Surgeon's office, Cox's Bazar
20-Nov	UNICEF Education Team, Cox's Bazar
21-Nov	Health Officer, UNICEF Rangpur Office
21-Nov	Nutrition Officer, UNICEF Rangpur Office

21-Nov	Additional Divisional Commissioner Rangpur
21-Nov	Education Officer, UNICEF Rangpur Office
21-Nov	C4D Officer, UNICEF Rangpur Office
21-Nov	Emergency Officer, UNICEF Rangpur Office
21-Nov	Child Protection Team, Cox's Bazar
21-Nov	UNICEF PMR Team, Cox's Bazar
24-Nov	UNICEF SPEAR
24-Nov	UNICEF Gender
24-Nov	UNICEF Education
25-Nov	UNICEF Nutrition
25-Nov	UNICEF WASH
25-Nov	UNICEF Field Services
25-Nov	BBS Head of SVRS
25-Nov	BBS Head of SDG
26-Nov	A2i
27-Nov	UNICEF Child Protection
27-Nov	UNICEF SPEAR Section Head

15.2 Appendix Two: Household Surveys 2009 – 2019

Year	Survey	Lead Agency	Technical Support	Funding Support	Sample Size (Households)
2019	Multiple Indicator Cluster Survey	BBS	UNICEF	UNFPA	64,000
2018	Sample Vital Registration Statistics	BBS	UNICEF	UNFPA	297,233
2017	Demographic and Health Survey	NIPORT	Mitra and Associates	USAID	19,457
2017	Coverage of Basic Social Services Survey	BBS	Bangladesh Institute of Development Studies	UNICEF	216,000
2017	Sample Vital Registration Statistics	BBS			295,175
2017	Health Facility Survey	NIPORT	Associates for Community Population Research	USAID	1,600 health facilities
2016	Child Well-Being Survey in Urban Areas of Bangladesh	BBS	UNICEF		18,887
2016	Household Income and Expenditure Survey	BBS	World Bank	World Bank	46,080
2016	Sample Vital Registration Statistics	BBS			220,872
2016	Bangladesh Maternal Mortality and Health Care Survey	NIPORT	Associates for Community Population Research	USAID	298,284
2015	Violence Against Women Survey	BBS	UNFPA	UNFPA	22,775
2015	Labour Force Survey	BBS		ILO	126,000
2015	Sample Vital Registration Statistics	BBS	UNICEF	UNICEF	215,811

Year	Survey	Lead Agency	Technical Support	Funding Support	Sample Size (Households)
2014	Education Household Survey	BBS			6,120
2014	Demographic and Health Survey	NIPORT	Mitra and Associates	USAID	18,000
2014	Sample Vital Registration Statistics	BBS	UNICEF	UNICEF	160,829
2014	Health Facility Survey	NIPORT	Associates for Community and Population Research	USAID	1,596 health facilities
2013	Survey on the Use of Remittance	BBS	Ministry of Finance		9,961
2013	Utilisation of Essential Service Delivery Survey	NIPORT			12,500
2013	Labour Force Survey	BBS		ILO	36,242
2013	National Child Labour Force Survey	BBS	ILO	ILO	36,242
2013	ICT Use and Access by Individuals and Households	BBS	ILO	ILO	36,268
2013	Multiple Indicator Cluster Survey	BBS	UNICEF	UNICEF	51,116
2013	Bangladesh Urban Health Survey	NIPORT	International Centre for Diarrhoeal Disease Research, Bangladesh	USAID	53,790
2013	Sample Vital Registration Statistics	BBS			158,829
2012	Time Use Pilot Survey	BBS			3,780
2012	Household Based Forest Survey	BBS			6,300
2012	Health Morbidity Status Survey	BBS			30,000
2012	Sample Vital Registration Statistics	BBS			206,522
2012	Child and Mother Nutrition Survey	BBS			
2011	Violence Against Women Survey	BBS	UNFPA	UNFPA	12,530
2011	Demographic and Health Survey	NIPORT	Mitra and Associates	USAID	18,000
2011	Health Facility Survey	NIPORT			
2010	Household Income and Expenditure Survey	BBS	World Bank	World Bank	12,240
2010	Labour Force Survey	BBS		ILO	43,945
2010	Literacy Survey	BBS			43,945

Year	Survey	Lead Agency	Technical Support	Funding Support	Sample Size (Households)
2010	Survey on Volunteerism in Bangladesh	BBS	United Nations Volunteers Bangladesh		43,945
2010	Sample Vital Registration Statistics	BBS			206,522
2010	Pilot Survey on Working Children in Dry Fish Industry in Bangladesh	BBS	ILO	ILO	2,112 establishments
2009	Monitoring of Employment Survey	BBS			14,000
2009	Welfare Monitoring Survey	BBS	World Bank	World Bank	14,000
2009	Household Food Security and Nutrition Assessment	Institute of Public Health Nutrition	Ministry of Health and Family Welfare	World Food Programme	90,250
2009	Multiple Indicator Cluster Survey	BBS	UNICEF	UNICEF	299,842

15.3 Appendix Three: UNICEF Data Commitments[176]

Diagnostic Report Section	Title	UNICEF Workplan 2017-20 Spend on Data		United Nations Development Assistance Framework UNDAF 2017-2020
		Committed Budget ($)	UNICEF Commitments	
2.2.1	7th 5-year plan			The UN Country Team (UNCT) in Bangladesh envisages a Development Assistance Framework for 2017 to 2020 at outcome level that aligns its work to the national priorities presented in the 7th Five Year Plan of the Government of Bangladesh and the Sustainable Development Goals (SDGs).
2.3.1	The Bangladesh Bureau of Statistics	1,885,312	Supporting BBS in strengthening data collection, analysis and reporting capacity for monitoring progress of national and SDG goals	The UNCT will support the Bangladesh Bureau of Statistics (BBS) by partnering in gender sensitive and disaggregated data collection on poverty and inequality, social protection and employment, to create a robust evidence base for advocacy, policy recommendations and programme design.
3.2.2	CRVS, SVRS and Population Register	392,447	Technical assistance to the Office of Registrar General in increasing the rate of birth registration within 45 days and use of birth certificate as a protection tool through cross sectoral coordination, capacity development and to link birth registration with CRVS system 1. 6000 Marriage register will technically be capacitated on use of birth certificate as a tool to reduce child marriage 2. Inclusion of Marriage registration within CRVS system & birth registration. 3. Provides mobile phone as an online registration tools to Marriage registration	

[176] This table is based on data extracted from the BCO workplan and UNDAF

Diagnostic Report Section	Title	UNICEF Workplan 2017-20 Spend on Data		United Nations Development Assistance Framework UNDAF 2017-2020
		Committed Budget ($)	UNICEF Commitments	
3.3.1	DHIS2	623375.65 / 21,412	Strengthen web based DHIS2 for planning, implementation and reporting of vaccine management, EmOC, IMCI, nutritional and new born HMIS. Support DGHS for benchmarking of WASH services in health centres for SDG baseline information and integrate SDG related WASH indicators in DHIS2	
3.3.3	Surveys	113,370	(1) Technical support to national survey - Multiple Indicator Cluster Survey- round 6 (WASH A107module includes Water Quality Testing, Water & Sanitation module and Handwashing module)	Uses many BBS and NIPORT surveys as: "Means of Verification".
3.4	WASH	454,634 56,550	Develop/strengthen National WASH MIS, GIS/GPS mapping to incorporate SDG WASH indicators for bench marking, evidence-based advocacy, WASH BAT, planning, monitoring and reporting of WASH projects in the country including DNCC. Programme Monitoring, Research and Evidence Generation	
3.4.1	Water Supply	67,711	Support the development, adoption, and scaling up of decision-making tools such as technology maps for safe water supply in selected hard to reach and arsenic prone districts	WHO-UNICEF Joint Multipurpose Programme for Water Supply and Sanitation

Diagnostic Report Section	Title	UNICEF Workplan 2017-20 Spend on Data		United Nations Development Assistance Framework UNDAF 2017-2020
		Committed Budget ($)	UNICEF Commitments	
3.4.2	Water Quality	113,370 10,801	(2) Technical support to national survey - Multiple Indicator Cluster Survey- round 6 (WASH A107module includes Water Quality Testing, Water & Sanitation module and Handwashing module). Facilitate and collaborate with the health sector in strengthening the arsenicosis surveillance database system / Technical support to review and integrate SDG related WASH Indicators including water quality in the EMIS.	The UN will also maintain an internal collective role and accountability under this Outcome, [including] access to quality basic services such as water.
3.6	Child Protection	722,776 proportion of 19,715	Supporting CHL, technology upgradation of database, link up of CHL database with District Legal Aid Offices, introduction of web based, and SMS based complain mechanism, Resource Directory, supporting the decentralized level operation of CHL-1098 to provide 24/7. (social protection with potential link to child protection). Monitoring of Results for Equity System: independent monitoring of effective coverage of key child protection interventions.	
3.6.1	Prevalence	Proportion of 19,715	Undertake Child Protection System Mapping, Produce thematic studies on child protection issues and violence against children, Evaluation of Child protection System.	
3.6.2	Case Management.	478,399	Upgradation and roll out of the online case management system through capacity development of Probation Officers, Social Service Officers and Social workers and monthly case conference.	

Diagnostic Report Section	Title	UNICEF Workplan 2017-20 Spend on Data		United Nations Development Assistance Framework UNDAF 2017-2020
		Committed Budget ($)	UNICEF Commitments	
4	Demand for data	120,588	Leadership management course and evidence - based planning for health managers in Bangladesh	
4.2	Data Reliability			In order to maintain data quality, the M&E group will set a standard guideline on the use of data, while the responsible agency in each case will help in identifying credible source of disaggregated data (for UN internal use).
4.3	Data Relevance			The UNCT's focus in areas related to employment, industrial management etc. will be on issues of equality, equity, and rights for groups, among whom these are not currently being realised, as well as on the generation of relevant and appropriately disaggregated data.
4.5	Popularising data	77,461	Capacity Development on Media and communication (child journalists, news literacy, and debating shows). Formation of Adolescent Radio Listeners Groups (ARLG) within adolescent clubs to equip them with knowledge and information. Setting up online portal (adolescent and child friendly web contents) for issue-based knowledge and information sharing among adolescents".	
5.1	Data Duplication			Civil society organisations are already active in Bangladesh in data collection and evidence generation, generally mobilising their own resources for this work. The role of the UNCT will be to collaborate with these organisations towards the creation of centres of data excellence that also strengthens national statistical entities to generate, promote, and analyse disaggregated national data and create real time monitoring system for improved results.

Diagnostic Report Section	Title	UNICEF Workplan 2017-20 Spend on Data		United Nations Development Assistance Framework UNDAF 2017-2020
		Committed Budget ($)	UNICEF Commitments	
5.3.1	UN Data Group			There are also other national entities that produce critical data and many other avenues that can be strengthened for data management. The UN has a long-standing relationship with these national entities. In the SDG era, it is imperative to develop a coherent approach to strengthening national statistical capacity to meet SDG data needs and fostering national accountability that leaves no one behind.
5.4	Interoperability	22,800,767	Implement Integrated Child Health (EPI, IMCI, ECCD, BR, Disability, drowning, WASH) Package (ICHP)	
6.3	National DRR Planning	2,982	By 2020, existing sub-national level coordinating structures have increased capacity to plan, monitor, implement and evaluate interventions that address children's issues, particularly in urban, rural and Chittagong Hill Tracts districts, ensuring the mainstreaming of Disaster Risk Reduction.	

15.4 Appendix Four: Knowledge Gaps assessed by UNICEF Field Offices[177]

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
Health						
Quality	Data authenticity.		Quality of data is a big concern.			
Clinics	Unavailability of data from the private health facilities.				Data is unavailable from the private health sectors whereas they play a key role in the Health sector of Bangladesh.	
Resources			Due to inadequate manpower (statisticians) and inadequate capacity 100% reporting is not yet possible.			Readiness of Tea-garden Health Facilities and capacity development of service providers.
HMIS	Dissimilarities between data from Health, Family Planning and NGOs.		DGHS has themselves a very strong HMIS system where data from each programme is entering.			
Excluded Pop.				Health perspectives of Women and children with disability. Effect of climate change on the health of women and children.		Increase of hard to reach support especially for EPI Coverage.
Research Suggestions				Explore different modalities to bring more adolescents to the adolescent health corners for service delivery	Research on Health service seeking behaviour is needed	

[177] This table consolidates internal reports submitted by UNICEF field offices

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
				.		
Nutrition						
Data use & skills	Nutrition data analysis skill and use of data for decision making process specially for DGSH and DGFP.		Lack of nutrition data analysis skill and limited use of data for decision making process.			Multi Sectoral approach for nutrition is not being implemented due to lack of accountability and monitoring system.
Baselines				Data on community-based longitudinal trial on nutrition intervention.		SMART surveys are required in Haor areas as there is no baseline data for nutrition.
Geographic Disaggregation				Impact of climate change on the lives of people in affected upazilas e.g. Koyra, Dacope, Paikgacha, Keshobpur, Monirampur e.g. can be survey to devise mitigation strategy.		
Research Suggestions				Also, trial is necessary for reducing the hospital stay for (?). Study on managing SAM focused on duration of hospital stay.	As per the MICS 2013 Severe Acute Malnutrition prevalence highest in Kurigram (3.4%) and 2.7 % is the second highest in Naogaon district. Therefore, additional investment is required from GOB and UN.	

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
Education						
Outputs not Outcomes (Quant not Qual)	Data on damaged schools. Area wise data on School facilities including PPE services, wash blocks, Teacher training. Secondary education related data on dropout, attendance. Cohort wise cycle completion data in Primary and Secondary level.	There is major data or knowledge gap on adolescent skill and employability in CHT.		Upazilla wise NSA information and findings.	Data gap on students learning experience inside classrooms. The Annual Primary School Census is a rich report with all statistical data including enrolment, cycle completion, teacher student ratio. The qualitative study on children's learning experience is completely missing in education report. This type of study will be able bring students learning experience inside a classroom (which is still a black box). This study can help understand teaching learning environment in schools and how to improve their experiences.	Causes behinds less achievement in Sylhet division need to be analysed and documented.
Data Lags						For addressing the key issues and progress tracking live/ Real time data on Pre-Primary and Secondary Education is badly needed.
Excluded Pop.					Data gap on children with disabilities and their schooling experience.	
Social and Geographic Disaggregation	District and sub district level data on learning.		DPE has all the data collected under Annual Primary School Census but publishes only district level data. DPE should create the provision of accessing	Upazilla wise coefficient of efficiency data and information.	Impact of climate change on children's education.	

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
			school and upazila level data for the planning purpose.			
WASH						
MIS	Lack of comprehensive WASH MIS system (Like HMIS).				Comprehensive WASH MIS system (Like HMIS).	
Disaster	Pre-crisis WASH data set for emergency response and recovery.				Pre-crisis WASH data set for emergency response and recovery.	
Climate Change	Mapping of climate change impact on WASH services and health issues.		Data on the effect of climate change.			
Political Economy of GW Quality				Systematic Ground Water Monitoring Data. Monitoring data of private sector activities on WASH sector.	Health impact due manganese and other chemical intrusion in ground water.	Allocation of more resource by GoB for addressing arsenic issues in the division.
Geographic Disaggregation				Union wise sanitation slippage data. Periodic Division Specific Water Quality Situational Data.		
Data Use				Division wise sectoral Budget allocation and utilization data.		Need to develop Haor strategy for WASH.

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
Child Protection						
Excluded Pop.	Data collection and research will be undertaken on violence, abuse and exploitation of girls and boys, including examining the differentiated types of violence and their impact, which is essential to planning/designing intervention strategies and setting numerical and time-bound targets to monitor progress in ensuring the protection of all children.			Adolescent suicide. Street children. Violence against children and adolescent including children with disabilities. Adolescent empowerment programme. Justice for children.		Lack of available data on VAC.
Geographic Disaggregation			Data collection, analysis and data understanding beyond upazila level (union or ward) is missing.			Lack of updated and Upazila level data on BR, Child marriage and Child labour.
C4D						
Data Lag			Updated data is missing; such as; % of child marriage, still 2013 MICS data is being used which is not accepted by the counterpart. Therefore, it is highly necessary to have a yearly based updated authentic data source to determine the progress.			There is no regular updated data on the SBCC situation of children and women in the Haors.

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
Social & Geographic Disaggregation				Early childhood development data and evidence specific to this division. Identify major DATA or knowledge gaps, which requires additional investment from Government and UN Evidence on how the climate change influencing increasing of child marriage in the division. Evidence on how the social and behaviour change component impacts in reducing school dropout and creating an enabling environment for children in the community. Data on community vulnerability due to climate change and how the resilience building helps communities to respond to the climate vulnerability. Impacts of salinity in adolescent health including maternal, child health		

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
MIS	Lack of data on knowledge and practices of key household behaviours in GOB MIS system.					
Baselines	Inadequate study/research on behavioural pattern/trend over time and social norms.					There is no baseline on the SBCC situation of children and women in the Haors.
Data Use						Special C4D Tea Garden and Haor Strategy required.
Field Services						
Data Skills				Identify and address the capacity gap of GoB-UNICEF programs to design more efficient programs to reduce the equity gaps.		
Political Structure Change			As GCC is new therefore it still shows data as Gazipur district.			
Data Use					Furthermore, it is important that the situation analysis establishes an understanding of the context and complicity of roles and decision-making processes of the local government and other important stakeholders. City Corporation staff, ward councillors and ward commissioners do not have knowledge of the	Understanding and capacity of LGI staff about evidence-based and child responsive planning and budgeting and monitoring. Knowledge and capacity of child centred disaster risk reduction and emergency response

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
					importance of children focused programming	
SDGs		There is gap in data on progress against SDGs in Chattogram division and especially in three hill districts.				
Excluded Pop.		UNICEF is operating at CHT for more than 30 years and yet there is no data or knowledge gap on evidence of changes we have made in the lives of children and young people.				
Geographic Disaggregation	Available Upazila and city wise MICS data for planning and monitoring results. Carry out local level survey for acquiring specific data/information generation for planning.		LGC: for effective planning updated authentic data needs to be available up to union level. Urban: City corporation wise MICS data for planning and monitoring is not available.		The MICS data and ECBSS data is up to district level. Only the administrative data can be available at Union and Upazila Level. However, for effective planning updated data needs to be available up to union level. Lack of data on children basic service and wellbeing in Rangpur City Corporation and Rajshahi City Corporation: The Child Wellbeing Survey 2016 does not have specific dataset on Rangpur City Corporation. In order to develop better service and children focused programming in the city corporation credible data source is needed on children	

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
					context and access to basic services.	
Research Suggestions					Therefore, a systematic study should be conducted to investigate children's access to basic services and issues related to child rights. The child rights situation analysis is an examination of statistics, local policies, laws and academic research relevant to the situation and well-being of children.	
Emergency						
Data Availability				Lack of available data. Lack of knowledge on climate change adaptation, and climate resilient programme.		

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
Data Use				Centralized planning and decision-making process.	Understanding gap on Child centred DRR: Government Officials have lack of understanding on child centred DRR and therefore, children issues, needs and priorities are not reflected in the DRR and emergency preparedness, response and recovery. The officials often ignore children basic rights and services during emergency. Therefore, knowledge on child centred DRR is important to improve the system to ensure child rights and situation.	

Knowledge Gap	Barisal	Chattogram	Dhaka & Mymensingh	Khulna	Rangpur	Sylhet
Social & Geographic Disaggregation					Lack of data on affected children and women: Data on affected children and women have now included in the revised D form. However, during any natural disasters it is proved that DRRO produces daily reports to share with the MoDMR and other relevant partners including UNICEF show that there is no information on affected children and women. More importantly, the format and information of daily reports shared by the DRRO varies from district to district. For instance, Kurigram report may have information on affected number of families whereas Nilphamari district may have information on affected number of populations. In order to get accurate data on affected number of people (gender disaggregated) all DRROs should develop a uniform template including information on children, women and people and children with disabilities.	

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