development initiatives

June 2020

Data issues and challenges for the UNICEF Bangladesh Country Office

Action Plan

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
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
DHIS2	District Health Information System, version two
DI	Development Initiatives
DRRC	Disaster Risk Reduction Committee
EMIS	Education Management Information System
EWS	Early Warning Systems
FAO	Food and Agriculture Organization
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoB	Government of Bangladesh
HMIS	Health Management Information System
LTA	Long-Term Agreement
MoHFW	Ministry of Health and Family Welfare
MoU	Memorandum of Understanding
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
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
UNICEF	United Nations Children's Fund
VAC	Violence Against Children

2 Introduction

2.1 About this action plan

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 Action Plan, backed up by evidence in an accompanying Diagnostic Report, making concrete and specific recommendations in relation to its investments in data over the next 3-5 years and beyond. It was requested that the Action Plan and Diagnostic Report should explore data concerns and opportunities in all the main areas of BCO's work, 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.

This Strategic Action Plan makes recommendations in six areas, focused on the priority issues listed above and on three essential cross-cutting concerns:

- Data demand
- Interoperability
- Harmonisation.

Because of the importance of these over-arching highest priority issues, this Action Plan does not make specific recommendations in relation to every area of BCO's work. Data issues in each sector are addressed in the accompanying Diagnostic Report.

2.2 Summary of findings

Bangladesh's economy is growing rapidly. The government has invested significant sums into information technology (IT) – for example current plans to distribute laptop computers to every state primary school in 2020. It launched Digital Bangladesh in 2007 to establish e-government processes. Supported by the joint government-UNDP a2i programme since 2011, Digital Bangladesh has made strong progress, including developing a first-class SDG tracker.

[1] https://data.unicef.org/resources/data-children-strategic-framework/
[2] http://devinit.org/

However, these advances in IT at the national level have not been matched regionally – at division or district level – or locally, at upazila or ward level. This, in part, reflects Bangladesh's strongly centralized state, with almost all planning and decision-making controlled by the national government. Meanwhile, administrative data is widely collected, but in a variety of hard-to-collate formats – many of them paper-based. There are also several gaps.

UNICEF Bangladesh is approaching the next country programme cycle, 2021-2025. 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 encourage new, harmonised investment into management information systems (MIS) to facilitate evidence-based decision-making in the coming years. The UNICEF country office has long been in partnership with the Bangladesh Bureau of Statistics (BBS) for data collection drives, including MICS and surveys of the effective coverage of basic social services (CBSS) including SDG data monitoring. BCO also has partnerships with independent agencies for collecting data and reporting for specific projects.

While these partnerships collect a substantial amount of data, much of it remains inaccessible or only available in aggregated non-machine-readable formats. The few online dashboards that do exist – notably for the Health Management Information System (HMIS) – tend to be difficult to navigate. There are no facilities for sharing or analysing data across departments or sectors. Survey data, despite being collected regularly and consistently, is only made available in the form of national statistical reports, rarely disaggregated below national or division levels. This makes it challenging 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. It is common for similar and overlapping surveys to be funded by different organizations, wasting resources, muddying the picture, and further discouraging use.

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. Nonetheless, UNICEF can help to make significant advances in the potential for data analysis and use, which would help to improve the lives of women and children in Bangladesh. We recommend focused efforts to make data more useful and accessible:

- Deliver on the SDGs, by improving management information systems that collect data at the point of service delivery– and by enabling access to local administrative data via portals
- Stimulate demand for data through making data more accessible – for those responsible for decision-making as well as those seeking to hold them to account
- Harmonise investments, roles, and responsibilities – across both government and donor agencies – to reduce overlaps and increase efficiency and effectiveness
- By way of an example encompassing all the above, create downward data flows to enable local communities to take informed action to reduce the impact of climate-related disasters.

These themes are reflected across the recommendations that follow.

3 Meeting the SDGs locally

3.1 Investing in administrative data systems to help meet SDG targets

The Sustainable Development goals are, naturally, a high priority for both the government and UNICEF in Bangladesh. In monitoring terms, the country has a good story to tell. The monitoring and evaluation framework are robust in both design and implementation.[3] National, aggregated data is available for 43 of the 50 child-related indicators of which UNICEF has oversight. It is available to all in an exemplary, user-friendly SDG tracker[4] within the government's open data portal – built for the Prime Minister's Office (PMO) with the help of a2i and BBS.[5] The SDG tracker is impressive enough for the government to have presented it at the 2019 United Nations General Assembly (UNGA), earning justified acclaim. Unusually for a country office, there is therefore no need for the BCO to focus efforts on SDG monitoring.

Instead, we recommend that UNICEF ***focus on improving the data that is needed to meet the goals***. 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. Both government and international agencies need local data, to identify specific problems and drivers. Without it, targeted interventions will be part-guesswork and less effective.

The only way to build sustainable, timely and comprehensive data infrastructures is to invest in:

- The last mile in local ICT infrastructures
- Robust digital administrative data collection and storage
- User-friendly dashboards to make it accessible to local decision-makers and communities.

Good administrative data, when aggregated to upazila, district, division or even national level, gives a more complete 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 – making it useful for 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.

3.2 Making the most of existing surveys

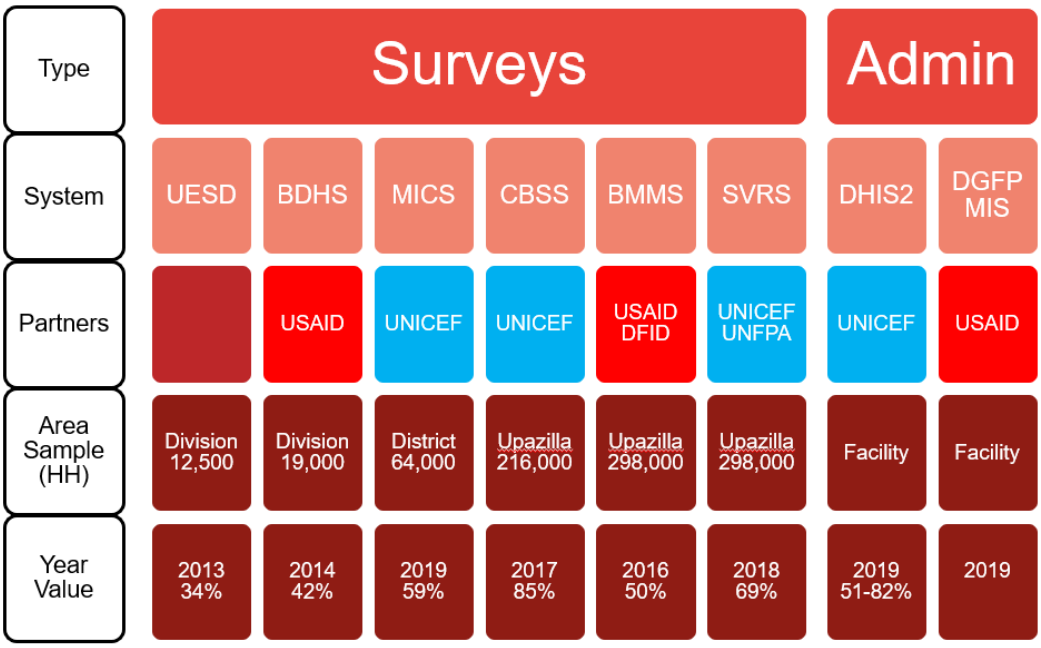
Given that, no matter what the scale of investment, a switch to administrative data will take a substantial amount of time to realise, household surveys will continue to play a critical role in the short to medium term. The Sample Vital Registration System, the Coverage of Basic Social Services Survey and the Bangladesh Maternal Mortality and Health Care Survey are three large-scale, regularly conducted

[3] http://pksf-bd.org/web/wp-content/uploads/2018/11/5.-Monitoring-and-Evaluation-Framework-of-Sustainable-Development-Goals-SDGs-Bangladesh-Perspective_opt.pdf
[4] http://data.gov.bd/dataset/sdg-tracker-bangladesh-sdgs-data/resource/b030eb26-a3a6-404e-9440-698e24bdbcd4
[5] http://data.gov.bd/

surveys with sample sizes close to 300,000 households, allowing for accurate upazila-level disaggregation. At upazila level, for example, the BBS maintains a standing cadre of the same data collectors (all female) organized to repeatedly survey a set of 100-150 households, on behalf of different surveys.

The full potential of these surveys is under-utilised for two reasons. Firstly, only high-level aggregations of the data are released – both publicly and within government - making the results of little value to local government. Secondly there is substantial duplication across the questionnaires. 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.

Figure 1 - Data collection for skilled attendance at birth indicator[6]



To maximise the use of existing survey regimes:

- Both BBS and NIPORT should be encouraged to publicly release more disaggregated data in machine readable format.
- BBS should empower district and upazila government officials to make use of this data.
- BBS should lead a rationalisation exercise to avoid duplication across different surveys.

3.3 Strengthening demographic foundations

Preparation has begun for the 2021 Household and Population Census. ***UNICEF should partner with UNFPA in providing support to BBS*** for two reasons. Firstly, it will provide a critical demographic baseline for the next ten years. Secondly it will utilise digital data capture for the first time. If this is successful it could provide important impetus for data collection in general.

[6] Consultants own research, November 2019. Abbreviations refer to: UESD -Utilization of Essential Service Delivery Survey; BDHS – Bangladesh Demographic and Health Survey; MICS – Multiple Indicator Cluster Survey; CBSS – Coverage of Basic Social Services Survey; BMMS - Bangladesh Maternal Mortality and Health Care Survey; SVRS – Sample Vital Registration System; DHIS2 – District Health Information System; DGFPMIS – Family Planning Management Information System

Comprehensive civil registration is essential to monitoring of prevalence across all sectors. The system for Civil Registration and Vital Statistics (CRVS) in Bangladesh remains patchy, with birth registration coverage currently at 56%[7]. The drive to improve CRVS uptake is perhaps hindered by the success of the Sample Vital Registration System (SVRS) which is a large sample[8] annual survey tracking vital and civil events. SVRS has been producing trusted statistics for nearly 40 years.

However, the GoB has made significant strides to improve civil registration, amending the Birth and Death Registration Act in 2013 and setting up the Office of the Inspector General of Registration (ORG) and a CRVS Steering Committee at the same time. This was good practice, giving the ORG clear responsibility for cross-government implementation of CRVS in Bangladesh. This has led to promising pilot breakthroughs in the completeness, coverage and timeliness of the data collected. Today 83% of births and 90% of deaths are being registered in focus districts.[9] This is in part due to incentives, including issuance of a birth registration number that is required for access to importance service provision, such as vaccination. We recommend ***encouraging GoB to use these numbers as permanent unique identifiers, for use across all services***, to enable interoperability.

Despite these advances in data collection – some of it digital – there is uneven interoperability between CRVS, national ID (maintained by the Electoral Commission) and the Single Registry for social protection. We recommend UNICEF to ***engage closely with GoB to support the creation of a single, comprehensive birth register that is integrated with national ID.***

The GoB's trialling of OpenCRVS[10], a foundational identity and population data system is a welcome development as it has the potential to extend and speed up digital registration in the field and BCO should support this initiative.

3.4 Aligning the SDGs with National Development Plans

Bangladesh already has baseline data for 127 SDG indicators.[11] It has also prioritised its own localised set of SDG-related national priorities, known as the "39+1", which are aimed at leaving no one behind in the shortest possible time.[12] However, the current (seventh) five-year plan – which sets out all of the government's operational activities – strong on ICT infrastructures and e-government services but has no explicit focus on the value of data, or of how to use it to meet targets. We recommend ***advocacy to encourage the General Economics Division, Planning Commission to include a section on data strategy in the Eighth Plan*****.** This needs to ensure that there is an alignment between the data needs of the national development plan and the SDG monitoring framework. It is important that this strategy focuses on the data requirements to ***meet*** the NDP and SDGs, not only 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.

3.5 Health – continue to strengthen DHIS2

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

[7] MICS 2019
[8] The 2018 survey covered 297,000 households
[9] Bangladesh CRVS Country Overview, October 2019 - http://attendance.dghs.gov.bd/dghs_notice/Bangladesh%20country%20overview_17.10.19.pdf
[10] https://www.opencrvs.org/case-studies
[11] 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
[12] http://www.sdg.gov.bd/page/thirty_nine_plus_one_indicator/5#1

UNICEF. In our opinion, this is one of the best HMIS deployments in the developing world. Information can both be input and accessed across over 13,000 community clinics and is increasingly widely used daily to read and update individual patient records. Although it necessarily only includes those people who attend clinics[13], it is wide-ranging, covering immunisation, ante-natal and post-natal care, and nutrition status, as well as records of illness and treatment.

In our view, it is symbolic of the GoB's insufficient understanding of the importance and value of administrative data 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 proper ownership*** of this excellent resource.

Worse, DHIS2 has become a victim of its own success, with health facilities' spiralling demand leading to critical overloading of the central server. This is having a major impact on data integrity. When community clinics (CCs) cannot enter data due to timeouts caused by data overload they revert to manual recording which is not consistently entered back into the system. Given its willingness to invest in IT, ***the GoB should be urged to replace the server as a matter of utmost urgency.***

There remains a large hole in data on health. Even though the licence required to operate a private health facility stipulates that reporting through DHIS2 is mandatory, private sector cooperation is low and ***advocacy is required*** to ensure that MoHFW enforces its own regulations.

Recruitment of technical staff, particularly at the district level, is also urgently required. 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. It was not clear to the consultants whether this is for financial reasons or a further indication of the low priority currently given to data management.

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 search and is difficult to use for data analysis.[14] We recommend that ***UNICEF should invest in the improvement of the HMIS public interface to facilitate better access and easier use***, of data and advocate for ***data training*** for all medical staff.

We further recommend discussion between government and relevant development partners to rationalise the substantial duplication currently taking place through the maintenance of the Family Planning Information Management System (FPMIS) in parallel to DHIS2. Having overlapping systems – containing large amounts of data that is similar – is a waste of resources, generates confusion and obstructs efforts to introduce interoperability. 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. In the first instance, we therefore recommend ***BCO to initiate discussions with FPIMS' main funder, USAID***.

3.6 Education – looking to the future of school records management

Bangladesh has separate ministries and data systems for primary and secondary education. Our research has focused wholly on primary schools. Children of primary age are the subject of a wide range of SDG targets. The difficulties for UNICEF – and others – in delivering these in the absence of

[13] Morbidity and mortality statistics are thus currently limited to cases treated in clinics.
[14] http://103.247.238.81/webportal/pages/index.php

public monitoring data are well-recognized. In addition, over-centralization of decision-making has led to weak local governance, with poor accountability to pupils and parents and weak incentives for schools to focus on education quality or learning outcomes. Assessments of students' ability are carried out annually, via random testing, but the assessments are not aligned to the curriculum being taught, rendering them of little use as a measure of the quality of education provision.

The BCO has decided to ***focus its immediate investments in strengthening the Annual Primary School Census*** (APSC), which has been collected since 2005 and covers both state and private primary schools. Disaggregated information used to be made available from the APSC, but since 2017 it has only been reported at a national level. 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. Ensuring that the APSC becomes a more robust foundation on which to build a more comprehensive Education Management Information System (EMIS) is a sustainable approach.

Most schools currently keep good paper-based records – in the form of 37 separate registers. Aggregating some of these into a digitalised reporting system – especially those focused on pupils, as opposed to infrastructure and resources – would be a useful next step. We recommend that, alongside its efforts to enhance the APSC, UNICEF start to ***lay the groundwork for the development of a robust EMIS.***[15] The first 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.

3.7 Child Protection – expanding case management

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. The 2019 MICS findings suggest that not only is VAC extremely prevalent, but that there is widespread cultural approval of physical punishment.[16] This is useful and gives BCO material to work with over the next couple of years, but MICS are not frequent enough to assess trends or programme impact.

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. Though it is a case management system, there are now enough records within CPIMS+ in the refugee camps – over 20,000 – that it can now be used to analyse trends, drivers and even prevalence. CPIMS+ is an effective system, fed by mobile data capture, that can be used to facilitate important sharing of information – for example between social services providers, police, or schools – while protecting confidentiality. This compares with paper-based data collection at community level (with records kept at ward or upazila level) in the rest of the country.

We recommend that UNICEF ***continues to explore the use of CPIMS+ in non-humanitarian settings***, as a cost-effective path to digitizing the case management records of the Community-Based Child Protection Committees (CBCPC). 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

[15] The developers of DHIS2 are now piloting an EMIS. Given the success of the HMIS, the robustness of its platform and its success in rolling out mobile data collection, this is a product worth exploring. https://www.dhis2.org/education
[16] Bangladesh Bureau of Statistics (BBS). 2019. Progotir Pathey, Bangladesh Multiple Indicator Cluster Survey 2019, Survey Findings Report. Dhaka, Bangladesh: Bangladesh Bureau of Statistics (BBS)

devise interventions to help meet several SDG targets. The BCO has already discussed this possibility, but talks have stalled. Given the relatively low cost of mobile data capture, we encourage BCO to pursue the matter. ***Funding one or more digital data capture pilots*** could create helpful evidence to support advocacy.

4 Using data to stimulate demand

4.1 The virtuous circle of data quality and demand

Digital Bangladesh has both generated and met demand for digital access to government services. Not included in Digital Bangladesh's priorities, however, 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.

As a result, there are still multiple gaps in digital data – for example, all police and justice records are still wholly paper-based. The data 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.

Digital Bangladesh could build substantially on its successes in delivering e-government services if it started to focus on making 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 availability, presentation, and visualisation of good public data*** via more and better sectoral and regional user interfaces. Such dashboards can only be developed if they are fed by reliable management information systems in all sectors.

The most cited reason not to invest in public-facing information systems is the absence of demand. Communities are not currently seeking to hold governments to account, officials at all levels are strangers to evidence-informed decision-making and no-one is trying to collaborate across sectors. These problems are by no means unique to Bangladesh. 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.

4.2 Popularising data

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.
- ***Developing data-fed mobile phone apps*** with information that people will find useful, following the useful example of the existing app to inform people of 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 supporting them with resources and advice.
- Encouraging BBS to release more disaggregated data with up-to-date documentation on data sources and analytical to ***enable researchers to conduct their own analysis and provide feedback on best practices***.
- Stimulating data journalism by ***supporting journalists to work with data*** to inform policy discussions.

4.3 Working with MPs

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, at the behest of the Prime Minister's Office – with the apparent intention of enabling government leaders to keep tabs on MPs – cross-mapping has now been done to make it possible to view progress against SDG targets by constituency.[17] This is at an early stage – SDG information is not yet broken down according to constituency boundaries. However, it represents an excellent opportunity. Constituency-specific web pages on the Tracker site 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.

4.4 Maximising the use of disaggregated survey data

Three existing surveys have sample sizes big enough – at over 290,000 households – to allow relatively accurate disaggregation of data down to upazila level. 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. This information – disaggregated to upazila level - needs to be made available as a first step to building dashboards for local users. We recommend that UNICEF should ***support BBS and a2i to provide a usable interface for this data at both district and Upazila level***. MICS data should also be made available at district level.

4.5 Cross-sectoral data for results monitoring

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.

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

At present, there is little evidence of institutional or system-level interoperability. 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 joins between them can be made wherever applicable**.** 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. These are being developed as functional platforms for different social service providers, with the aim that the Deputy Commissioner can use them to monitor outputs and outcomes cross-sectorally. This will allow them not only to take remedial action where provision does not match demand, or take steps to increase uptake where demand does not match supply, but also to plan across the board, and to identify which combination of services is most effective at delivering results and achieving SDG targets.

RMUs are designed, appropriately, for cross-sectoral data use. However, there is not yet enough information available for them to be useful. We therefore 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.

5 Harmonising investments and activities

5.1 Gaps and overlaps

Bangladesh has many development actors – including government agencies, NGOs, bilateral and multilateral agencies. Many of these recognise the importance of information technology and play a role in commissioning or collecting data. Yet there are large gaps in digital data in almost every sector. Bangladesh's 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. The existence of separate demographic data agencies, such as NIPORT, serves to undermine the Bangladesh Bureau of Statistics and creates confusion.

Meanwhile, after ten years of "One UN", there is limited evidence of real collaboration between UN agencies and still less donor harmonisation or collective strategic planning in the field of data.

5.2 A collaborative UN data group

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.

We strongly recommend that UNICEF should ***lead a transformation of the data group***, so that it focuses on:

- Collective identification of priority data and system gaps
- Co-ordination of investment decisions to match need
- Collaboration on survey design to meet multiple agency needs.
- Internal use of available cross-sectoral data to inform decisions

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).

5.3 A Development partners data financing group

Most countries have a formally constituted Development Partners Forum that meets regularly. In Bangladesh, such meetings only take place on an ad hoc basis. This makes it difficult to facilitate focused and sustainable coordination. 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 FPIMS 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 (see Figure 1, above).

5.4 Data strategies within UNDAF and the GOB's 8th Five-Year Plan

The 2017-20 UN Development Assistance Framework document is thin on data issues. Similarly, data is scarcely mentioned in the government's current Seventh Five Year Plan. We recommend that UNICEF should ***advocate for separate sections on data strategy*** within the next versions of both. The aim should be the availability of data good enough to enable evidence-informed 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.

5.5 Empowering the Bangladesh Bureau of Statistics

Under the current Statistics Act, BBS is the only government agency mandated to produce and disseminate national statistics. It should therefore be 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.

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

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.

5.6 Empowering the National Data Coordination Committee

This could be done through the National Data Coordination Committee (NDCC) – set up specifically to support and advise 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 (not only SDG monitoring) - and drive cross-government commitments. This would also help to bolster BBS.

5.7 A unified national indicator framework

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. 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'.[18] 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 in section 5.5 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.

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

6 Enabling community disaster risk reduction

6.1 Focusing climate investment on local data to enable local preparedness

Climate-related disasters – in the form of ever more frequently-occurring floods, cyclones, and other storms – are a huge issue in Bangladesh. Environmental sustainability and resilience are set out as areas of top strategic priority in the current UNDAF, and among the three emerging areas of importance in the 2017 Bangladesh Country Office Annual Report. Mainstreaming climate adaptation was also a key recommendation of a strategic review commissioned by BCO in 2016.

From a data perspective, communities vulnerable to disaster face all the obstacles set out in this action plan (and the accompanying diagnostic report):

- Administrative data is weak – and poorly-focused. Most data collected on disaster risk relates to physical infrastructure. Even after disasters occur, Ministry of Disaster Management (MDM) procedures focus on damage to transport facilities, buildings, energy supply rather than people.
- Data is poorly linked. Information from national climatic early warning systems are not fed into local risk reduction strategies. This is, in part, because in Bangladesh data tends to flow upwards into the centralised state rather than downwards to the needs of local government.
- Demand is poorly articulated and not met. Communities in flood-prone divisions like Rangpur are keen to make efforts to protect themselves – but they do not know what to prioritise, and do not know what information to ask for – or from whom – to help them.
- Harmonisation is poor, both horizontally and vertically. The MDM manual contains impressive plans and structures, but nothing on data. Early warning information is not routinely shared with any departments responsible for service provision, or local government.

6.2 Making national early warning data available to local committees

We strongly recommend that UNICEF does not engage itself directly with others' efforts to improve climate monitoring at the national level. Any technical concerns should be raised in the UN data group, as discussed in section 7.2 above. Rather, BCO should ***focus its efforts on advocating for a downstream pipeline and interface, so that information reaches the places and people that need it.*** The value of accessible, timely, accurate data could not be greater than it is for communities at risk from natural disasters.

We recommend advocacy to UNDP and FAO – as well as to Bangladesh's meteorological Storm Warning Centre and Flood Forecasting and Warning Centre – to ***deliver, in an appropriate format, all relevant early warning data to local Disaster Risk Reduction Committees*** (DRRCs). This can be done using existing local government and National Disaster Management Council (NDMC) structures. Despite the existence of a network of over 2,000 DRRCs – overseen by district-level Disaster Management Committees and, in turn, by the NDMC – the system is not currently used to provide information to where it is needed. Even the most urgent and basic information – such as storm warnings – are only disseminated to the population via the news media.

6.3 Joining EWS data with community demographic and service data

As well as empowering local committees, cross-sectoral data needs to be made available to whole populations. This would require data to be linked – ideally within interoperable information systems, as set out in section 6.1 above. Anticipating and managing risk in areas prone to climate-related disaster would be an ideal context to pilot attempts to link data from EWS to information from CRVS, DHIS2, EMIS and so on.

This could then be presented in user-friendly formats, using the same architecture as the district dashboards and mobile phone apps proposed in section 5 above. We therefore recommend ***local pilots of people-centred interfaces to assist in the planning of DRR*** at the community level.

7 Bridging political and institutional divides in Cox's Bazar

The Diagnostic Report provides evidence of the lack of any concerted data coordination by national and international institutions in dealing with the Rohingya refugee crisis. It highlights the political differences between the government and the humanitarian agencies over the status of the Rohingya and observes the competition and lack of any mature collaboration between UN agencies.

The solution to the lack of a data nexus 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***.

UNICEF can also play a key role in building on the one data nexus success story, child protection case management. As highlighted in Section 4.6 above there is a great opportunity for CPIMS+ to be used nationally, not only for case management but, ultimately as a source of aggregated prevalence statistics.

8 Responding to the COVID-19 pandemic

At time of writing Bangladesh is facing extremely serious threats, both in terms of health and economic well-being, from the COVID-19 pandemic. The evidence required to plan a response to this demands that the epidemiological data - that can now be delivered by the new DHIS2 COVID tracker module[19] - be combined with all existing data describing the vulnerabilities and needs of the population to deliver practical operational intelligence of immediate value. The 2019 Multiple Indicator Cluster Survey (MICS), the 2018 Sample Vital Registration Survey (SVRS) and the 2017 Coverage of Basic Social Services Survey (CBSSS) all have the potential to provide useful context to COVID-19 tracking data. Facility performance data from DHIS2 and the recently released microdata from the 2017 Bangladesh Health Facility Survey add a further dimension to this context.

BBS and a2i should be encouraged and empowered to integrate the microdata from these systems and surveys to provide a single national database that provides disaggregated data on population vulnerabilities and health service capacities that can be used both to aid in predicting the likely spread of the disease and prioritise the allocation of resources to areas where they are most likely to be needed.

[19] https://www.dhis2.org/covid-19

Development Initiatives (DI) is an independent international development organisation working on the use of data to drive poverty eradication and sustainable development. Our vision is a world without poverty that invests in human security and where everyone shares the benefits of opportunity and growth.

We work to ensure that decisions about the allocation of finance and resources result in an end to poverty, increase the resilience of the world's most vulnerable people, and ensure no one is left behind.

Contact
Bill Anderson – Systems Specialist
Bernard Sabiti – Policy Specialist
David Hall-Matthews – Writer
Lina Salameh – Project Manager

To find out more about our work visit:
www.devinit.org
Twitter: @devinitorg
Email: info@devinit.org

Development Initiatives is the trading name of Development Initiatives Poverty Research Ltd, registered in England and Wales, Company No. 06368740, and DI International Ltd, registered in England and Wales, Company No. 5802543. Registered Office: North Quay House, Quay Side, Temple Back, Bristol, BS1 6FL, UK.

UK OFFICE
Development Initiatives
North Quay House
Quay Side, Temple Back
Bristol, BS1 6FL, UK
+44 (0) 1179 272 505

KENYA OFFICE
Development Initiatives
Shelter Afrique Building
4th Floor, Mamlaka Road
Nairobi, Kenya
PO Box 102802-00101
+254 (0) 20 272 5346

UGANDA OFFICE
Innovation Village,
Block C, 3rd floor, Ntinda Complex
Plot 31 Ntinda - Kisaasi Road,
P.O. Box 25760, Kampala, Uganda
Tel +256 39 324 1297

US OFFICE
Development Initiatives
1110 Vermont Ave NW,
Suite 500, Washington DC
20005, US