Briefing



What gets measured, gets managed

Challenges ahead for UN's data-driven development agenda

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- The overlap of development agendas offers a great opportunity to synchronise policy efforts notably through a common core of indicators and a harmonised database that reflect the true interdependence of development objectives – for multidimensional, inclusive and sustainable development across all three major agendas.
- While these agendas are data-driven in their concept and targets, there are, however, bottlenecks in the design, scope, structure and the nature of available data; these could severely impede achieving sustainable success across all three agendas.
- Some data gaps are operational inadequacies: such as paucity of data, infrequent and uneven coverage of data, lack of uniformity in rules and procedures for gathering data, the absence of harmonising between fragmented existing data-streams, and the dearth of publicly available data resources. Other forms of data gap are more conceptual: such as measurement indicators missing the notion of sustainability and lack of distributional aspects, and the inability to capture future potential developments that have implications on current decisions.
- The UN Secretary General is strategically positioned to address some of these data-gaps through its operational and conceptual stewardship of all three development agendas. It can also play a unique role in coordinating data-related efforts across national governments, civil society groups, and international financial institutions, including the multilateral development banks to deliver a robust data-driven development platform.

1. Introduction

'It is a capital mistake to theorise before one has data.' —Sir Arthur Conan Doyle

The United Nations (UN) has led the international community during 2015–2016 through landmark summits in an effort to set a coherent and comprehensive global development agenda that emphasises broad socio-economic development, is environmentally sustainable, and is inclusive in the distribution of the gains – including for those most vulnerable to and marginalised by humanitarian disasters. In this scheme, the Sustainable Development Goals (SDGs) provide an overarching and potentially unifying development framework. The agreement at 2015 United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP21) – (Paris Agreement) and the World Humanitarian Summit (WHS) in Istanbul complement the SDGs by targeting particular facets of the comprehensive development pathways.

In effect, the fortunes of this triumvirate of development agendas are closely tied to one another: each agenda will only succeed if the other two are also successful. Their overlapping pathways create opportunities for complementarities in their building blocks and policy approaches. But these interlinkages are also a source of tension, conflicting approaches and competing priorities in the sequencing of policies. Most significantly, their interdependence implies that failure to achieve one will invariably impede the chances of sustainable success for the other agendas.

In this paper, we focus on data challenges that need to be addressed to implement successfully all three agendas individually and collectively. We look beyond the data gaps to concerns of data sufficiency, data suitability, and the conceptual blind-spots inherent in some of the chosen/ short-listed measurement metrics and indicators that could hamper achieving the intended development outcomes. We highlight some main concerns rather than attempting to provide an exhaustive list of data gaps.

2. Data-centric development agendas 2.1 Data needs of individual agendas

Data systems form an integral component in driving policies and practices in the envisaged development process. While the centrality of data in successful development processes has been well-documented (UN, 2008; United Nations Development Programme (UNDP), 2009; Sustainable Development Solutions Network, 2015; UN, 2016a), the use of data by the international community in the past has consistently fallen short when setting priorities, designing implementation strategies and policies, and evaluating outcomes. The SDGs and the Paris Agreement have rightly highlighted the importance of investing in good information (and the capacity to generate and use it within countries) in order to determine existing benchmarks, set appropriate targets, monitor progress, inform interventions and hold actors to account. The SDGs set an ambitious agenda for the 15-year period with 17 goals and 169 targets to be pursued by countries of all income levels. They reflect a new consensus on fundamental development challenges that require action at national and global levels, from eradicating poverty and tackling extreme inequalities, to finding more environmentally sustainable routes to growth, creating decent jobs, and building peaceful societies (UN, 2014).

Each of the 17 SDGs is backed by a quantifiable and verifiable set of indicators detailing both the existing levels and intended targets (UN, 2016b). An elaborate and ongoing process orchestrated by the UN Statistics Commission working with the Inter-agency Expert Group on SDG Indicators (IAEG-SDGs) has developed an initial set of 230 global indicators presented in three separate tiers of importance to monitor SDG goals and targets (United Nations Economic and Social Council, Statistical Commission, 2016). Moreover, SDG 17 explicitly seeks to foster a 'Data Revolution' – to create a comprehensive and systematic indicator framework that includes improved data capacity, monitoring and accountability.

In similar ways, the Paris Agreement relies on data and data-based systems in pursuit of its goals. Routine reporting of verifiable data is key to this development agenda, with an emphasis on emissions reporting, climate action taken, and support received. There is a call for a data-driven understanding of the vulnerabilities to the impacts of climate change to support both mitigation and adaptation initiatives – from a global level through to disaggregated local levels.

The WHS agenda, through a set of five core responsibilities, is targeted towards those facing humanitarian crises through effective aid and their inclusion in the development process. But unlike the formal negotiation-based agreements that form the basis for the UN-SDGs and the COP21 arrangements, the WHS was informal by design and used a wide consultative process involving over 23,000 global stakeholders to map out 32 core commitments that are fairly broad and not yet based on distinct set of metrics. As part of this broad-based informal approach, the WHS attempts to group together prominent but fragmented data of humanitarian actors through a number of individual and collective data initiatives, including the launch of the Humanitarian Data Centre in The Hague - but without yet specifying an exact mechanism of shortlisting or streamlining the indicators to be used. Moreover, the agenda does not yet have an explicit monitoring framework in the way that the other two development agendas do; it relies on a tapestry of self-monitoring mechanisms across governments, NGOs, and institutions.¹ We however anticipate that the WHS agenda will eventually formalise its data systems and structures to identify those in need, the nature and extent of their needs, and the monitoring and tracking of assistance delivery mechanisms. To that end, the UN Secretary General has proposed the creation of an online Platform for Action, Commitments and Transformation (PACT) that is intended to be "a dynamic advocacy tool for all stakeholders in their efforts to advance the Agenda

1. Details of the existing data and monitoring mechanisms are at http://www.agendaforhumanity.org/

for Humanity and the commitments made at the Summit and to foster new commitments and partnerships".²

2.2 Data needs of overlapping agendas

In addition to the separate data needs of each of these three agendas, the overlap between them is reflected in the measurement metrics across the agendas – in determining existing benchmarks, in setting desired and achievable targets, and in monitoring the transition process. For instance, the objective to 'take urgent action to combat climate change and its impacts' (SDG 13) is central to overall climate agenda. Similarly, the seven Tier I indicators of SDG 13 (already established) and the Tier II and III measures (yet to be finalised) could be key to setting the benchmarks and targets, and tracking progress in delivering Intended Nationally Determined Contributions (INDCs) within the Paris Agreement framework.³ In addition, goals to extend access to clean energy (SDG 7); decent work and economic growth (SDG 8); industry, innovation and infrastructure (SDG 9); sustainable cities and communities (SDG 11); and responsible consumption and production (SDG 12) also have direct policy and measurement links to the climate agenda.

It is more difficult to trace the direct overlap between WHS and the other two agreements primarily because the WHS is different in structure. The WHS is so far being driven by a series of decentralised initiatives, with some of them directed towards creating data platforms. As a consequence, the data needs are also not centralised. Hence it is premature to discern the extent of direct overlap in the metrics between WHS and the other agendas.

Nonetheless, the overlap of objectives is quite evident. WHS core commitment area 3 to 'leave no one behind' is identical to the broad overall outlook across multiple SDGs, although WHS focuses on those in need of humanitarian assistance in conflict situation and fragile states where needs are more intense than those chronically underserved. It further narrows it focus on displaced population – both internally and those across borders (refugees), whereas the SDGs include the developmental needs of entire populations. In addition, the aim of WHS to empower women and girls to participate in decision-making fully and equally at all levels, and to protect them against gender-based violence, closely resembles the targets for SDG 5 (that is, 'Achieve gender equality and empower all women and girls').

Similarly, the WHS goal to provide safe, inclusive, quality and free education so that no child or young person misses out on school because of a crisis also mirrors SDG 4 that seeks to ensure free, equitable and quality primary and secondary education to boys and girls universally – with some appropriate indicators already adopted, and others being developed. SDG 16, which sets the goal of promoting peaceful and inclusive societies for sustainable development, providing access to justice for all and building effective, accountable and inclusive institutions, reflects the entire WHS agenda and in particular closely resembles the WHS commitment area 1: 'Political leadership to prevent and end conflicts'.

There is also interdependence between climate agenda and WHS: climate change has already triggered new sources of vulnerability, creating new forms of stress, loss of livelihoods and economic security, migration and depravation. Meeting the climate-change agenda – through both mitigation and adaptation - will play a critical role in the attempt of the global community to meet WHS commitments. The United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA) has been the global coordinator of for international humanitarian campaigns and even some large national efforts for over 25 years. They identify 'humanitarian development nexus' as a key theme in their operational strategy. They have also been trying to bring about a paradigm shift - of incorporating response to underlying vulnerabilities, such as those by climate change, in addition to shock driven changes.4

3. Overlapping metrics: a blessing or a cause for caution?

The overlap of development agendas carries both benefits and risks. In the virtuous case, it offers a great opportunity to synchronise policy efforts - notably through using a harmonised common core of indicators - to bring about the desired multidimensional, inclusive and sustainable development across all three major agendas. Such indicators can help create a unified database that reflects the true interdependence of development objectives and responses. They would also have a better chance of consistency in construction, convention, definition over time and across location. However, overlapping indicators could also be the source of major drawbacks: poor quality of indicators - either due to lack of data or ill-suited definition and construction, or both - could then adversely affect the pursuit of all three major agendas simultaneously. The ripple effect of data gaps is much greater across all three agendas than across independent and isolated development goals.

In the remaining part of this paper we highlight some common data issues that, if left unresolved, could create serious impediments to delivering better indicators and better outcomes across these three major agendas.

4. The blind-spots of the SDGs

We discuss three main blind-spots in the existing framework of the SDGs, their targets and tracking indicators:

- 1. the large data-gaps and paucity of publicly accessible data;
- 2. the missing notion of sustainability in the chosen metrics; and
- 3. the lack of data on the distributional aspect of the development agenda.

^{2.} Agenda for Humanity: Vision and Objectives. http://www.agendaforhumanity.org/about-us

^{3.} For the latest scheme of SDG indicators and tier classification, see the Documents section of http://unstats.un.org/sdgs/meetings/iaeg-sdgs-meeting-04/

^{4.} See http://www.unocha.org/what-we-do/policy/thematic-areas/humanitarian-development-nexus

4.1 Large data-gaps and paucity of publicly accessible data

The 17 SDGs, their 169 targets and the 230 indicators shortlisted so far and classified into three tiers are quite extensive. Only Tier I indicators have been finalised, but these indicators are those that are most easily achieved. By construction, Tier I indicators are 'conceptually clear, [have] established methodology and standards available and data [are] regularly produced by countries' (UN STATS, 2016). Many are established MDG-era indicators. But there are only 80 Tier I indicators, accounting for 35% of the database needed just for the SDGs.⁵

The remaining Tier II and III indicators are still to be finalised: they are currently either gathered too infrequently to be meaningful to track progress, or have been reclassified from Tier I pending unresolved quality issues (Tier II), or the proposed metrics lack an established methodology and standards and it will take time and effort to develop and test them. Even among the Tier I indicators, there are many that lack data on all countries for the entire range of years being sought. For example, the World Bank World Development Indicators, (WB WDI), which are the primary source of basic income/wealth distribution and poverty metrics, report that they lack data for 77 countries (typically middle- or low-income countries) over the past 10 years to assess the recent trajectory of their povertyeradication initiatives reliably (Serajuddin et al., 2015). Further, only 62 % of Tier I indicators (and about 25 % of all indicators) have data online in publicly accessible formats (Dunning and Kalow, 2016). This indicates the extent of gaps in data even in the best formulated of the three development agendas.

Data provides the *tools* for decision-making, so the paucity of data hampers effective policy-making. In addition, the lack of publicly available data hinders effective monitoring and accountability of the development initiatives – key elements in the inclusive and transparent SDG development *process*. Regular updates of the database, and the creation of systems making the data publicly accessible in user-friendly formats, would address some of our concerns about this large data gap. But we anticipate that this would require sustained political through initiatives and funding; so far such commitments have tended to be scarce across all administrative levels.

4.2 Missing notion of sustainability

Sustainability of the development process and outcomes – across economic, social and environmental dimensions – is a key aspect of the SDG agenda. In fact, 11 of the 17 goals explicitly use this term to define and describe its objective. Sustainability is inherently a forward-looking concept that spans an extended time horizon. Yet the targets associated with these 17 goals and 230 tracking indicators across all three

tiers are by construction neither forward-looking nor do they reflect the lifetime of outcome flows of the policy decisions.

First, data on current levels and past trends have serious limitations on the extent to which they can inform the future economic and environmental sustainability of these policies, practices and choices. They fail to capture potential future developments (such as likely technological breakthroughs) that the notion of sustainable practices and policies demand. For illustration, data on power generation, transmission and distribution costs are based on historical trends that primarily used non-renewables. We have not yet devised techniques to capture the costs and benefits of emerging technology still under development, such as off-grid and micro renewable power sources that could offer significant gains to achieving development and climate objectives. This handicap is similar to the problem faced in devising effective indicators to monitor SDGs that are future-oriented, such as building resilience and adaptability to the effects of climate change (discussed in greater detail in the section on COP21 Paris Agreement).

Second, even future-oriented investment decisions for programmes and physical infrastructure are typically based on indicators with a relatively short time horizon - using metrics such as internal rates of return (IRRs) and costbenefit analysis.6 Decisions based on such truncated time horizon lock us into policies and investments that might be prudent in the short-run but might be sub-optimal and, at times, even counterproductive in the long run. As an illustration, for many middle- and low-income countries, energy-infrastructure investments using carbon-rich and greenhouse-gas-generating technologies such as coal-fired power-plants are still cheaper than renewable energy sources over five to 10 years. However, such facilities have an operating lifespan of more than 25 years, sometimes more than 50 years, whereas the financial calculations are based on a much shorter time horizon.⁷ Using indicators that incorporate long-term approaches of asset evaluation - particularly over the entire lifecycle of the assets and using anticipated discount rates - can help mitigate some concerns of this extended time horizon.

Indicators based on existing or past experience are inherently backward-looking. To turn such indicators' orientation into the future, one option might be to incorporate complementary qualitative data or quantitative projection data that can factor in uncertain future possibilities with some sort of probability assessments. We could adapt estimating methods adopted in business decision assessments (McKinsey, US Securities and Exchange Commission).⁸ But as these illustrations of commercial accounting of uncertain future also highlight, such qualitative or non-verifiable approaches will need to be based on a uniform convention of predicting principles, to limit the tendency for ad-hoc and subjective assessments. We currently do not have such a system, and we certainly need one to be incorporated into the SDG data framework.

- 6. Five or 10 years are the typical limits used for computing IRR for commercial projects.
- 7. Source: http://www.iea-coal.org.uk/documents/81405/5990/Life-extension-of-coal-fired-power-plants)
- 8. See http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/strategy-under-uncertainty and https://www.sec.gov/about/offices/oca/ocafrseries-briefing-measurement.htm

^{5.} A Center for Global Development (CGDEV) report "SDG Indicators: Serious Gaps Abound in Data Availability" estimates that only 42 % of the indicators are Tier I (Dunning and Kalow, 2016)

4.3 Lack of data on the distributional aspect of the development agenda

While the SDGs are framed under the rubric of 'leave no one behind', most indicators being used for tracking and monitoring are predominantly macro indicators. Even when they are framed in per capita terms, such as for SDG 8 that seeks to 'promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all', most data are still based on aggregate measures. They systemically fail to capture the distributional aspects of the benchmarks, the policies and their impact. Even in instances where we do have some internationally comparable data that feeds into core distributional indicators such as income or consumption distribution (measured by indicators such as Gini coefficients), the data are not harmonised - resulting in fragmented indicators over scope and time. Data is not available for all countries at regular time intervals; the World Bank has no official (publicly available) income-inequality data for countries in the Middle East and North Africa region, and in some cases the most recent country statistics are from 2005 (WB, 2016).9 There has been some success in harmonising data - such as different indicators of income inequality using alternative measures from the same institutional source, the World Bank (Smeeding and Latner 2015). But this limited success is a reflection of the wider, persistent, unresolved problem of fragmented data across indicators, time, and different sources.

Besides, we have very limited data and understanding of distributional patterns of other indicators that directly affect the benchmarks and intended targets of SDGs. Multiple SDGs seek to mitigate and eventually eliminate existing imbalances in access to services (such as health, education, economic opportunities, property rights etc.). The targets require policies and programmes focused on serving chronically marginalised segments of the population such as children, women, ethnic minorities and rural inhabitants. But we cannot expect to meet the SDGs without disaggregated data: only data can reveal the existing patterns of imbalance or help to monitor progress in redressing these imbalances. An assessment of the Millennium Development Goals (MDGs), the predecessors to the SDGs - highlights the consequences of not using disaggregated data: the MDG-driven policies that only focused on average effects did lead to an impressive reduction in overall poverty. However, the poorest and most marginalised segments of the population either did not benefit at all, or not enough to be lifted out of poverty (Bhatkal et al., 2015).

Disaggregated data from household surveys could indicate the patterns of development, particularly for those who are chronically marginalised – the forms, extent and dimensions of their exclusion. The best sources of such data are the World Bank's Living Standards Measurement Surveys (LSMS)¹⁰, the Demographic and Health Surveys (DHS)¹¹, and the Multiple Indicator Cluster Surveys (MICS)¹², to name a few prominent ones. A few of these surveys are being used for monitoring SDGs.

However, the construction of these surveys pre-date the SDGs. And so their use is being planned on the basis of what is already available in the survey modules as tried and tested indicators, rather than being the most accurate metric to effectively monitor SDGs. Moreover, the surveys differ in their methodologies, they were designed for different purposes, and so make consolidation of diverse sources into a harmonised database extremely difficult (Ferreira et al. 2015). A composite database based on a uniform methodology could conceivably permit assimilating disaggregated data from different surveys into a unified platform - such as health information from DHS and information on access to reliable all-weather road access from LSMS for the same household. With such information, we could assess the impact of one policy on multiple targets across multiple household characteristics concurrently (such as whether the rural poor in a particular region of a country face specific impediments to reach hospitals using all-weather roads, and how access to health services for such a marginalised group might change with investments in roads).

We suggest that for goals and targets that have distributional issues at their core to capture truly the objectives of those goals, the new metrics being designed and tested (Tier II and III) should be collected by household surveys as far as possible. We also recommend that these different surveys use comparable methodologies, making it feasible to consolidate the separate strands of surveys into a comprehensive, unified database. The scope of household surveys must also be broadened. Additional targeting might be necessary to capture the conditions of and effects on groups trapped in pockets of deprivation where the needs of development are the most acute. One illustration is the survey-based assessment of working conditions and motivations of children in slums who are otherwise not represented adequately in aggregate metrics, in official national surveys such as census, or in small sample surveys (Quattri and Watkins, 2016).

5. The data challenges of the COP21 Paris Agreement

The 2015 Conference of Parties (COP21) in Paris achieved a legally binding international agreement on climate spanning 188 participating countries, with the aim of keeping global warming well-below 2°C from pre-industrial times. This agreement is deeply grounded in data monitoring greenhousegas (GHG) emissions and the removal of these gases from industrial, agricultural, and other processes. Data is also a key component of tracking the progress of each country against their Intended Nationally Determined Contributions (INDCs) to limit and reduce GHG emissions; data is also central to monitoring its effects of actions to mitigate

^{9.} See World Development Indicators, 2016 (http://wdi.worldbank.org/table/2.9)

^{10.} World Bank, Living Standards Measurement Study, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTLSMS/0,,menu PK:3359053~pagePK:64168427~piPK:64168435~theSitePK:3358997,00.html

^{11.} https://dhsprogram.com/

^{12.} http://mics.unicef.org/surveys

and adapt to the effects of climate change over time. The UNFCCC has devised a detailed set of transparent, systematic, consistent and verifiable indicators and a matching time-table for reporting this data as a key component of the global needs based on which the INDCs are being proposed and enacted.¹³

While the frameworks for data gathering, recording, reporting and verification are fairly well-developed, we highlight the following three unresolved problems that could potentially undermine the effectiveness of the agreement's implementation:

- 1. the conceptual challenge of calibrating responses to an uncertain future;
- 2. capacity constraints in poorer economies to fulfil their data commitments; and
- inconsistency in rules and procedures for reporting and monitoring.

5.1 Accounting for an uncertain future

While our empirical models to predict long-term climate conditions have become increasingly sophisticated over time, there is still a fair degree of uncertainty in predicting long-term future climate. This makes planning and devising policy responses to mitigate and adapt to climate-change effects even more difficult and imprecise.

While measuring and tracking GHG emissions is backwardlooking and has a relatively well-settled methodology, less clear is the approach for predicting future climate conditions. Moreover, we have no precedent of current levels of GHG concentrations and so little basis for empirically suggesting the possible impact of a non-linear rising trajectory of GHG. And as a result, it is difficult to design accurate climate adaptation and mitigation actions that would be accurate and adequate in meeting their national climate change ambitions. Most approaches involve making some kind of climate projections for the future, but they differ in their methodology and assumptions. Burke et al. (2015) show that differences in assessment principles for climate uncertainty result in wide variations in estimated climate-change impacts, including instances of severe underestimation of the impacts. One remedial approach has been to offer a range of expected future projections achieved through different modelling methods, rather than provide an imprecise point estimate of future climate change.

5.2 Capacity constraints to monitor data

All 188 countries have agreed to the binding commitments of this conference, and are required to submit their national plans to meet their intended targets. However, it is doubtful if all countries and notably many low- and middle-income countries possess the financial and technical capacity to monitor GHG emissions and their INDC compliance routinely. The very countries with the least resources to manage the impact of the climate change will also tend to be the ones that have the least resources to match the data-gathering and reporting standards set by the high-income countries.

Possible remedies for this data handicap include the cheap transfer of technology through some form of financial support in pricing of equipment to monitor GHGs, and the training of personnel in the use of such tools and techniques. While a few middle-income countries such as Brazil have deployed some of the most sophisticated systems - including equipment and techniques - for monitoring the impact of climate change (LSE 2015), such experiences are exceptions in the developing world. A wider spread of monitoring technology and data systems might require the creation of a fund to finance transfer of technology and training, like the technical-assistance programmes funded by international financial institutions (IFIs). Another approach might involve multilateral development institutions such as the World Bank or the regional development banks to incur the initial fixed costs of setting up necessary data-gathering facilities, with country governments bearing the subsequent routine operational expenses.

5.3 Inconsistent rules and procedures for reporting and monitoring

In addition to the unpredictability of the future, rules and procedures for reporting and monitoring are non-uniform, and this makes it harder to orchestrate a coordinated, unified approach to deal with the global challenge. Uniformity in data systems is key to a transparent regime of controlling climate change, and for better accountability of policies designed to achieve the agreement targets. But while the importance of consistent systems for data gathering, reporting and monitoring is fairly obvious, devising such a universally accepted GHG-recording regime remains a work in progress (World Resources Institute (WRI), 2004). As UNFCCC reports, countries and even international institutions differ in their assessment of which gases constitute GHGs, the sources that form a part of the monitoring regime, and the frequency of data recording and reporting.¹⁴ Part of the problem arises because in some locations, monitoring is mandatory, in some it is voluntary (depending on the nature and size of the establishment); there are also distinctions made between commercial sources and non-commercial ones.15 The major IFIs including the World Bank have led the process of harmonising GHG accounting tools and also early adaptation tracking tools, but the challenge is to implement it consistently and across all countries.

6. The missing links of WHS

The UN Secretary General convened the World Humanitarian Summit (WHS) in 2016 to highlight the critical links between war, poverty, inequality, climate change and disaster impacts; and efforts for risk reduction, crisis management and

14. See http://unfccc.int/ghg_data/ghg_data_non_unfccc/items/3170.php

^{13.} See section on 'Process' in UNFCCC (http://unfccc.int/2860.php)

^{15.} See United Kingdom Department for Environment, Food and Rural Affairs (2009) *Guidance on How to Measure and Report Your Greenhouse Gas Emissions*. London. (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69282/pb13309-ghg-guidance-0909011.pdf)

response.¹⁶ The summit combined 9,000 grassroots, multistakeholder participants from across the aid sector, regional groupings, international non-governmental organisations, a large range of civil society, and private-sector organisations for informal consultations with high-level political entities, including 55 heads of state and government, and UN agencies. The summit detailed 'a five-point action agenda that outlines the changes that are needed to alleviate humanitarian suffering, and reduce risk and vulnerability' (WHS).¹⁷ This action agenda is not a formal agreement but comprises commitments by any set of participants of the summit; these commitments are dependent on data, and will have limited success if some the existing data-gaps are not addressed. Below we elaborate on two unresolved data issues:

- 1. the lack of clarity on data needs; and
- 2. the lack of data on people facing humanitarian crises.

6.1 Lack of clarity on data needs

While the commitments of WHS would need to rely on data to drive its agenda of five-point core responsibilities and 32 commitments and to monitor any progress, the precise indicators that would enable this have yet to be defined and refined. The description of the action agenda indicates that these commitments could have a high degree of overlap with some of the SDGs. However, the action-agenda items are broad and open to diverse subjective interpretations, even if they focus on people affected by conflict and are displaced. For instance, WHS's core commitment area 3 to 'Leave no one Behind: A commitment to address forced displacement' - overlaps with the overall theme across multiple SDGs. However, the WHS agenda has not yet specified the dimensions or extent along which humanitarian interventions will occur to make their development more inclusive. A similar case relates to the core responsibility of "Changing people's lives: From delivering aid to ending need". Lack of defining the "end of need", the metric to be used for assessing this goal - and if it can ever be fully achieved could jeopardise the success of achieving the targets.

As WHS initiatives are keen to focus on segments of the world population facing acute humanitarian emergencies and in some cases, in linking these short-term needs with longer-term development goals, it will be critical to link the indicators for WHS commitments to the broader SGD goals. Definitions of what constitutes suffering humanitarian strife need to be established first, prior to any tracking and evaluating based on data.

6.2 Lack of data on people facing humanitarian crises

People facing humanitarian needs tend to be least reviewed through systematic assessments of population, whether through official census or other household surveys. While we get some information from refugee camps (the World Bank is currently undertaking surveys among immigrants

and refugees from Northern Africa in settlement camps in Italy) and from some national statistical organisations, those are not gathered systematically and also most often do not capture the large sections of the population who get dispersed within countries and do not congregate at any specific location for any extended period of time, or those who remain in conflict hot-spots throughout humanitarian crises. This results in chronic under-reporting (and also leads to misreporting) by as much as 250 million people who are omitted worldwide from population survey samples by design (Carr-Hill, 2013). There is currently no datagathering mandate within WHS, and it should be included in the priority commitments. While UN-OCHA highlights needs assessment as one of their key operational themes, their mission statement however does not explicitly identify gathering as a priority for its efforts.¹⁸ In the absence of such information it is extremely difficult to identify who needs humanitarian assistance and what their priority needs are.¹⁹

7. Conclusion: how data can help deliver the post-2015 development agenda

The three agendas considered in this paper are complementary. Just as the holistic SDG agenda presents a foundation for some aspects of the climate agreement and can serve as a basis for many of the WHS commitments related to protracted crises, in similar vein, the data needs and indicators shortlisted for the SDGs are the most diverse among these three development initiatives and lend themselves to the climate and humanitarian agendas.

There are, however, data blind-spots and data ambiguity, which we have highlighted in this paper and which currently blight the composite development agendas. We can exploit the benefits of synergy among the indicators and development agendas if we are able to overcome these impediments. In summary, the main impediments are:

- large data-gaps and paucity of data for SDGs
- the missing notion of sustainability and lack of distributional aspect in SDG indicators
- SDG and climate-change indicators being ill-equipped by design to capture future developments, of external environmental conditions as well as of changes in policy options and technology
- capacity constraints in those countries with the greatest need to incorporate indicators of the climate agenda
- lack of uniformity in rules and procedures of monitoring climate agenda
- lack of clarity on data needs of WHS
- difficulty in unifying data that are collected by individual agencies and institutions and hence are fragmented, uncoordinated and non-standardised – and also do not have complete coverage

^{16.} See WHS (2016) Commitments to Action.

^{17.} See https://www.worldhumanitariansummit.org/

^{18.} http://www.unocha.org/#

^{19.} The WHS (2016) did host a session titled "Bedrock of our Action? Improving the Impact of Data in Displacement Situations", and there are voluntary data commitments and isolated initiatives to create data portals. But there is no explicit data gathering mandate within the process. (https://environmental migration.iom.int/whs-side-event-bedrock-our-action-improving-impact-data-displacement-situations)

• difficulty in reaching those in conflict and disaster conditions, and hence systematically missing out on those segments of the population that may be in most need.

In this paper we have also indicated some possible remedies; a few are already being tried and some could be undertaken by the international community. Some conceptual issues around particular types of indicators and agendas however remain unresolved.

Development agencies understandably have specific expertise and data pertaining to their core areas of development expertise (such as the World Bank in large investment financing of infrastructure and social-protection programmes, UNICEF in identifying and mitigating children's poverty, or the Food and Agriculture Organization and the World Food Programme in hunger and food-deprivation metrics). This paper suggests that greater coordination and harmonising their separate databases would help in monitoring and assessing the outcome of policies across parallel development agendas. This would also be useful to overcome fragmentation of the data ecosystem and encourage coordination between relevant actors (IFIs and UN agencies serving as 'custodian' of particular datasets) and data capacity-building initiatives across these three major agendas. However, to realise such benefits, datasets would need to be openly accessible. Not all datasets are currently publicly accessible.

The UN Secretary General's office can play an important role in coordinating data efforts across UN agencies and other relevant actors, such as IFIs, to achieve a coherent data ecosystem – and broaden the scope and harmonisation of data gathering, management and reporting systems. The Global Partnership for Sustainable Development Data is a prominent initiative undertaken to form global networks of data that span official sources (governments and international agencies), civil society, non-governmental agencies and independent non-profit development institutions.²⁰ This Global Partnership, using the SDG indicator framework that is the most comprehensive and refined among these three development agendas, can help the SDGs act as a natural docking station, coordinate between development agenda needs and avoid duplication. For example, as experts within the humanitarian system discuss a monitoring framework for the WHS, they could involve key actors from the development of the SDG framework or UN agencies custodian of a small sub-group of SDG datasets that are relevant to specific WHS commitments. As we discussed above, there are potential synergies between the UNFCCC data capacity provision and that of the SDGs. The new Centre for Humanitarian Data, set to be launched in 2017 to pursue the WHS agenda, can also help exploit its data overlap with the climate agenda.

However, some data gaps can only be filled by increasing the frequency and scope of data-gathering exercises, particularly those that are household- or individual-based. But this raises the cost of data gathering and management. In developing countries where spending needs are more acute and fiscal constraints higher, spending on programmes is often prioritised over spending on data (gathering and analysis).

This creates a definite role and unique opportunity for multilateral IFIs as well as interested donor countries and institutions to push investments in data capacity in countries with weak statistical capacity. The IFIs can make the core starting investment in creating the data-gathering and management capacities and systems; the national governments can subsequently incur the operational expenses. By being involved in setting up data systems IFIs can ensure consistency in approach across countries, ensure the adoption of best practices in data management, and also derive economies of scale from having performed similar exercises in multiple contexts and countries. Technology can also help minimise the cost implication of such initiatives, as with the webbased MyWorld2030 survey instituted by UNDP; these modules, when implemented, are designed to be nationally representative samples.²¹

Transparency through readily accessible and up-to-date data is a key accountability mechanism. Investing in good data and open data portals stimulates informed debate and better policies (and necessary course corrections) on where we are making progress on these major agendas, and how it can be accelerated. In particular, better data collection and disaggregation will be needed to monitor progress on the principle of 'leaving no one behind' which cuts across the different agendas; for instance, by including data on vulnerable groups that are also relevant to the WHS agenda, such as refugees, internally displaced people and migrants, those most susceptible to the adverse effects of climate change and to the range of SDGs (Nakhooda et al., 2016).

Following the spate of agreements and summits in 2015–2016, the stage is now set for developing systems to start to put into operation the outcomes from those gatherings, and exploit the synergies between overlapping development agendas. The High Level Political Forum meetings have been assessing progress on the SDGs. The next two meetings, titled 'Eradicating poverty and promoting prosperity in a changing world' in 2017, and 'Transformation towards sustainable and resilient societies' in 2018, have natural overlaps with the COP21 climate agenda; the IAEG-SDGs meetings are making headway on finalising Tier II and III indicators, and considering the possibility of upgrading, replacing, or even adding to the indicators for the SDGs. A stock of progress on the Paris Agreement is scheduled for 2018, and the first update of INDCs for 2020. These events will either be directly hosted by the UN, or will be closely affiliated to different UN agencies.

In the years ahead, the UN Secretary General will be strategically positioned to offer stewardship across all three development agendas concurrently. His office will be best placed to create pathways for coordinating between the agencies pursuing different development goals – both within the UN family and other large multilateral institutions. We recommend that his office helps establish systems that can institutionalise this data overlap, create a coherent data ecosystem that overcomes existing data gaps. The office can also stimulate introduction and incorporation of incorporate new indicators that create a virtuous cycle of helping achieve all the interlinked and interdependent development agendas.

^{20.} Global Partnership for Sustainable Development Data (2015). (http://www.data4sdgs.org/)

^{21.} UNDP (2015) MyWorld2030 (http://myworld2030.org/)

References

- Bhatkal, T., Samman, E., and Stuart, E. (2015) 'Leave no one behind: The real bottom billion', Briefing. London: ODI. (https://www.odi.org/publications/9899-leave-no-one-behind-sdgs-mdgs-extreme-chronic-poverty-policy)
- Burke, M., Dykema, M., Lobell, D.B., Miguel, E. and Satyanath, S. (2015) 'Incorporating Climate Uncertainty into Estimates of Climate Change Impacts'. *The Review of Economics and Statistics*, 97(2): 461-471. (http://www.mitpressjournals.org/doi/abs/10.1162/REST_a_00478?journalCode=rest#.WFFy4OaLSUk)
- Carr-Hill, R. (2013) 'Missing Millions and Measuring Development Progress', World Development. Vol. 46: 30-44. (http://dx.doi.org/10.1016/j.worlddev.2012.12.017)
- Dunning, C. and Kalow, J. (2016) SDG Indicators: Serious Gaps Abound in Data Availability, Washington, DC: Center for Global Development
- Ferreira, F.H.G., Lustig, N. and Teles, D. (2015) 'Appraising Cross-National Income Inequality Databases: An Introduction', Journal of Economic Inequality. 13(4): 497-526.
- Global Partnership for Sustainable Development Data (2015) (http://www.data4sdgs.org/)
- IEA (2015) Energy and Climate Change: World Energy Outlook Special Briefing for COP21. Paris: OECD/IEA. (https://www.iea.org/media/news/WEO_INDC_Paper_Final_WEB.PDF)
- London School of Economics (LSE) (2015) 'The Global Climate Legislation Study: Brazil Country Profile', (http://www.lse.ac.uk/GranthamInstitute/legislation/countries/brazil/)
- Nakhooda, S., Lucci, P., Bennett, C., Bryant, J. with Watson, C. (2016) 'Our Shared Future: Implementing the Sustainable Development, Climate and Humanitarian Summit agendas'. London: ODI.
- Quattri, M. and Watkins, K. (2016) 'Child Labour and Education: A Survey of Slums Settlements in Dhaka'. London: ODI.
- Serajuddin, U., Uematsu, H., Wieser, C., Yoshida, N. and Dabalen, A. (2015) *Data Deprivation: Another Deprivation to End*, World Bank Policy Research Working Paper 7252. Washington, DC: World Bank.

(http://documents.worldbank.org/curated/en/700611468172787967/pdf/WPS7252.pdf)

- Smeeding, T. and Latner, J.P. (2015) "PovcalNet, WDI and 'All the Ginis': A Critical Review", *Journal of Economic Inequality*. 13(4): 603-628.
- Sustainable Development Solutions Network (Center for International Earth Science Information Network, ODI, Open Data Watch, Paris21, Simon Fraser University, Sustainable Development Solutions Network, UNIDO, UNICEF) (2015) Data for Development: A Needs Assessment for SDG Monitoring and Statistical Capacity Development. (https://sustainabledevelopment.un.org/content/documents/2017Data-for-Development-Full-Report.pdf)
- United Nations (2014) The Road to Dignity by 2030: Ending Poverty, Transforming All Lives and Protecting the Planet Synthesis Report of the Secretary-General On the Post-2015 Agenda. New York. (http://www.un.org/disabilities/documents/reports/SG_Synthesis_Report_Road_to_Dignity_by_2030.pdf)
- United Nations, Department of Economic and Social Affairs, Statistics Division. (2016) Fourth meeting of the IAEG-SDGs. (http://unstats.un.org/sdgs/meetings/iaeg-sdgs-meeting-04/)
- United Nations, Department of Economic and Social Affairs (2016a) *Global Sustainable Development Report* 2016. New York. (https://sustainabledevelopment.un.org/content/documents/2328Global%20Sustainable%20development%20report% 202016%20(final).pdf)
- United Nations (2016b) Sustainable Development Goals Knowledge Platform. New York. (https://sustainabledevelopment.un.org/?menu=1300)
- United Nations, Department of Economic and Social Affairs Office for ECOSOC Support and Coordination (2008) Achieving Sustainable Development and Promoting Development Cooperation Dialogues at the Economic and Social Council. New York. (http://www.un.org/en/ecosoc/docs/pdfs/fina_08-45773.pdf)
- UNDP (2015) MyWorld2030 (http://myworld2030.org/)
- UNDP (2009) *Handbook on Planning, Monitoring and Evaluating for Development Results*. New York. (http://web.undp.org/evaluation/evaluations/handbook/english/documents/pme-handbook.pdf)
- United Nations Economic and Social Council, Statistical Commission (2016) Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators – Note by the Secretary-General E/CN.3/2016/2/Rev.1 (http://unstats.un.org/unsd/statcom/47th-session/documents/2016-2-IAEG-SDGs-Rev1-E.pdf)

United Nations Office for Coordination of Humanitarian Affairs. (http://www.unocha.org/#)

UN STATS (2016) *Tier Classification for Global SDG Indicators*. New York. (http://unstats.un.org/sdgs/files/meetings/iaeg-sdgs-meeting-04/Tier%20Classification%20of%20SDG%20Indicators% 20Updated%2023-09-16.pdf)

WHS (2016) Commitments to Action (http://www.worldhumanitariansummit.org/sites/default/files/media/WHS%20 Commitment%20to%20Action_8September2016.pdf)

World Resources Institute (2004) 'Verification of GHG Emissions' in *GHG Protocol*, Chapter 10. Washington, DC (http://pdf.wri.org/ghg_protocol_2004_chp010.pdf)

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This material has been funded by UK aid from the UK Government, however the views expressed do not necessarily reflect the UK Government's official policies.