MONITORING SUSTAINABLE DEVELOPMENT GOALS: NOTE ON BASELINES FOR DRR TARGETS AND INDICATORS

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February, 2015

1. Context

A year ago the SDG office issued a draft of the Open Working Group on Sustainable Development Goals (OWG) Statistical Note for the issue brief on: Climate Change and Disaster Risk Reduction. It set out most of the relevant markings for a sound monitoring process of disaster impact[i]). It outlined the broad directions for statistically sound processes for capturing disaster impact albeit mainly within the climate change framework. The Informal Working Group for Target and Indicators proposed a monitoring time frame of 15-years (till 2030) for the global targets on disaster risk reduction except where specified and a baseline period of 10 years preceding the period of review.

The establishment of baselines for global targets and indicators draws its importance from the need to monitor effectiveness of interventions and to make sense of impact assessments. In the context of Sustainable development Goals, these baselines need to be set within the sustainable development process and not a standalone exercise.

2. Specific Considerations

Proposing a baseline presupposes that a system is in place that collects the same data year after year, disaster after disaster in a comparable and transparent manner. In this context, the first requirement to monitor targets and indicators would be to define a 'disastrous event' in a way that is both measurable and conceptually reasonable as a disaster. Or else each event will be different according to whoever decides what is disastrous at that time. Furthermore, in the post MDG period, further efforts should be made to capture the effects on human populations that are relevant to sustainable development especially environmental change.

Second, while standardising raw data is absolutely key and well taken by the IWG, presenting the death tolls per capita may need review. Our analyses in CRED show that population figures change very slightly from year to year and little even over 10 years. This means that the denominator used to divide the death toll to generate the per capita figure, will barely change from one year to the next and the result will be the same as the raw number. We will essentially be dividing with a constant. Many examples can be shown to illustrate this. Other methods to arrive at the same objective of standardizing could be considered such as some version of 'difference in differences' over time. This technique will not require different

data but will reflect trends maybe a bit better than comparing deaths per capita which will be same as using raw data.

Third, comparing an annual disaster toll to a baseline that is the 10 year average of past disasters is the option under discussion. This approach can be a little tricky since the profile of disasters in a 10 year period is very unstable in most countries. Just one major earthquake can completely change the 'baseline'.

For example, using a 10 year baseline of annual average of disaster deaths from 2005 – 2014, can radically change a country' performance if a high death toll earthquake happens just the year before the start of the 10 year period (2004) or the year after (2015). Many geophysical disasters with high mortality (eg earthquakes, volcanic eruptions and related tsunamis or landslides) have national return periods that are well beyond 10 years and problems of this nature will significantly affect the whole process.

A baseline option with a firmer footing in the sustainable development goals could be to measure whether the disaster affected community is presenting higher death rates than expected in the period (eg 6 mths following the disaster) – that is 'excess deaths' that may be attributable to the disaster shock. In this case, the baseline is the 'normal death rate' in that region and not the average of the 10 yr disaster death tolls. This approach would further resolve the nearly unsolvable debate on distinguishing direct and indirect deaths from disasters as it would capture all deaths. It has the added advantage of reflecting the broader developmental effects of the disaster and its effect on populations through a composite indicator. The National Statistical Offices have the data to estimate the death rates both before and after the event or quick sample surveys could be conducted by them to make these estimations.

Equally importantly from an institutionalization point of view, this approach may have two additional advantages. First, involving the National Statistical or Civil Registration offices will mainstream the disaster impact data collection at national levels. Second, these offices have in-house skills to undertake the necessary monitoring and related analyses.

In conclusion, the IWG framework proposing using the X% reduction in disaster related mortality and a baseline to monitor progress is unquestionably a pragmatic approach. It provides focus to a process that can otherwise quickly dissolve into vague and imprecise assessment. The Post MDG, Sustainable Development Goals monitoring should help national authorities to review DRR targets and reform programmes by measuring the impact of disasters within in the national development framework. The evidence on disaster deaths and victims should be as sound and persuasive as possible.

[i] https://sustainabledevelopment.un.org/content/documents/3288stat20.pdf