WN *Guest editorial*

World Nutrition **Volume 6, Number 7-8, July-August 2015**

Journal of the World Public Health Nutrition Association
Published monthly at www.wphna.org/worldnutrition/

Food and nutrition insecurity

World hunger books are cooked

Every year the UN Food and Agriculture Organization (FAO) publishes a *State of Food Insecurity in the World* (Food Insecurity) report. *The 2015 report* has just come out. *An accompanying note* on the FAO website summarises its message as follows:

> With the number of chronically hungry people in developing countries declining from 990.7 million in 1991 to 779.9 million in 2014, their share in developing countries has declined by 44.4 per cent, from 23.4 to 12.9 per cent over the 23 years, but still short of the 11.7 per cent target.

This is claiming that the halving of chronic undernourishment envisaged in the first Millennium Development Goal (MDG-1) is nearly on track. With one year to go, we'll surely get pretty close to the 11.7% target for chronic undernourishment in the developing world. However, before any celebrations, here are some facts.

Massaging the numbers

The initial version of the promise to halve chronic undernourishment by 2015 was made at the 1996 World Food Summit in Rome. This envisioned halving the *number* of chronically undernourished people in the world between 1996 and 2015. The UN General Assembly's *Millennium Declaration* of 2000 diluted this goal by promising to halve the *proportion* of chronically undernourished people in the world's population between 2000 and 2015 which, given population increase, significantly reduced the drop in the number of undernourished needed for success.

Once more retaining the language of halving chronic undernourishment by 2015, MDG-1 diluted the goal yet again by promising to halve the proportion of chronically undernourished people in the faster-growing populations of developing countries between 1990 and 2015. Backdating the baseline took advantage of progress in China before 2000 and of greater population growth over 25 years, which means that a 27% reduction in the number of undernourished now suffices to halve undernourishment! Had the original World Food Summit interpretation been retained, the achieved reduction would be less than 15 percent: from 931 million in 1996 to 795 million in

2014. Even this distinctly modest progress is due *entirely* to the FAO's abrupt change of methodology announced in its 2012 Food Insecurity report. Here are the official FAO numbers of chronically undernourished, in millions, according to the old and new methodologies side by side:

	Old	*New*
1990	843	1010
1996	788	931
2001	833	922
2006	848	884
2008	963	867
2009	1023	867
2010	925	868
2014	-	795

It is bad practice to make so dramatic a change in methodology, with hindsight, in year 22 of a 25-year measurement exercise. Besides, it is incredible that undernourishment should have continued its decline while food prices near-doubled from 2005 toward twin peaks in 2008 and 2011, as documented in the FAO's own food price statistics. Moreover, the used definition of undernourishment is absurd. A person is counted as undernourished only if (a) her or his food *energy* availability (no other nutrient deficiencies count) (b) is inadequate to cover even minimum needs for a sedentary lifestyle (c) for over a year (*State of Food Insecurity 2012*, page 50).

This definition fails to include those who are seriously short of other crucial nutrients. It fails to count those who must do hard physical labour and thus need more than 1800 kilocalories a day. And it fails to count all those who are desperately hungry for months but not for more than a year. To take in the full absurdity of this definition, realise that according to it, an undernourished rickshaw driver is a biological impossibility. This is because if such a person (consuming 3000-4000 kilocalories per day) were to fall below the calorie intake needed for a sedentary way of life, he would be dead long before the year is up and thus never appear in the FAO's statistics!

Hunger is vastly underestimated

The FAO's new methodology vastly understates the number of chronically undernourished populations and people. This produces a much-too-rosy trend picture. And this is not an isolated case. There have been various other changes in definitions and measurement methods associated with other MDG targets which have also resulted in rosier trend-lines. It is improbable that this is just a random coincidence.

The 2015 FAO Food Insecurity report explicitly defends the new methodology against two criticisms made by *myself and others:*

FAO. 'At the moment, few surveys accurately capture habitual food consumption at the individual level and collect sufficient information on the anthropometric characteristics and activity levels of each surveyed individual'.

Response. So, conduct some surveys, instead of repeating your flawed exercise! Even just a weighted random sample of a few hundred people would give you a sense of the quality (or lack thereof) of your estimates for some country or province. It is a scandal that world hunger is estimated in the primitive way that it is, so that we don't know, even roughly, how many people actually suffer chronic undernourishment.

FAO. 'Within the population, there is a range of values for energy requirements that are compatible with healthy status, given that body weight, metabolic efficiency and physical activity levels vary. It follows [!] that only values below the minimum of such a range can be associated with undernourishment, in a probabilistic sense. Hence, for the PoU [prevalence of undernourishment] to indicate that a randomly selected individual in a population is undernourished, the appropriate threshold is the lower end of the range of energy requirements.'

Response. What really follows, is that one has to use the minimum of the range to be absolutely certain of never counting as undernourished anybody who actually is not. But this fails to count hundreds of millions of people who have enough calories for a sedentary way of life with low body weight and high metabolic efficiency, but do not have enough calories for their *actual* work load, *actual* body weight, *actual* metabolism. As Robert Chambers of the Institute of Development Studies points out, the FAO method also misses all those who take in food with sufficient energy content but fail to absorb enough of this energy. Many poor people have a diminished capacity to absorb food. Intestinal parasites can steal up to one-third of food ingested. Less absorption from the damaged small intestine means continuous diversion of nutritional energy to fighting infections. In all these ways, the FAO is undercounting those who are short of calories – on top of not counting those who are short of nutrients other than energy.

The poor are being betrayed

FAO official decisions may well be driven by the best intentions. Like with other UN agencies, top officers of the FAO serve at the pleasure of politicians and get funding from politicians; and may have to help politicians defend their policies, notably their grand globalisation project. If I were an FAO official, I might give politicians nicer-looking numbers and trend figures in exchange for greater support for FAO's work.

Nonetheless, we must not allow the poor to be so dramatically betrayed. Chronic undernourishment is likely to be vastly more common and persistent than the FAO statistics claim. There needs to be an independent group of experts producing estimates that can be trusted. It is our responsibility as world citizens to relieve the FAO's dreadful conflict of interest, and our professional duty to develop reliable estimates, even if governments jealously defend their data monopoly. Academics and other qualified colleagues can do this job. We should join forces to do so.

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