

*This article is reprinted with permission from the author. It is originally published in the NSCB website ([www.nscb.gov.ph](http://www.nscb.gov.ph)) under the heading of "Statistically Speaking." Statistically Speaking presents viewpoints and perspectives of the members of the NSCB Technical Staff on statistical concerns, such as correct and appropriate use of statistics in clarifying common or gross misinterpretation, misrepresentation, and erroneous reporting of statistical information, best practices in the generation and dissemination of official statistics, recent developments in statistics and other areas of interest to our stakeholders.*

## GUTOM KA BA?

by Dr. Romulo A. Virola<sup>1</sup>

Many of us know that an overarching Millennium Development Goal is to eradicate extreme poverty and hunger. Our own Medium-Term Philippine Development Plan (MTPDP) declares that its basic task is to fight poverty. To be able to assess our progress and the effectiveness of poverty eradication programs in achieving this goal, we need hard data. We need statistics. In our age of supersonic strides in information technology, a framework of decision-making scientifically grounded on sound statistics will in the long-run produce better if not the best choices!

How do we measure hunger, statistically?

The United Nations<sup>2</sup> reports that more than 1 billion people subsist on less than \$1 a day; that more than 800 million people have too little to eat to meet their daily energy need; and that more than a quarter of children under

age 5 in developing countries are malnourished.

In the Philippines, latest official estimates from the NSCB show that in 2003 about 25 out of 100 families and 30 out of 100 individuals were poor while 10 out of 100 families and 14 out of 100 individuals were food poor. These are modest improvements from their levels in 2000. On the other hand, official data from the FNRI 6th National Nutrition Survey show that for 2003, out of 100 children 0-5 years old, about 27 are

**In the Philippines, latest official estimates from the NSCB show that in 2003 about 25 out of 100 families and 30 out of 100 individuals were poor while 10 out of 100 families and 14 out of 100 individuals were food poor.**

underweight (suffering from current malnutrition), 30 are stunted (chronic malnutrition) and 5 are wasted (acute malnutrition). These are likewise modest improvements from their 2001 levels. The Food Balance Sheets (FBS) of the NSCB also tell us that supply of food whether as sources of energy, protein or fats is at least 50% more than actual

<sup>1</sup> Secretary General of the National Statistical Coordination Board (NSCB) and Chairman of the Statistical Research and Training Center (SRTC). He holds a Ph. D. in Statistics from the University of Michigan in Ann Arbor, USA and has taught mathematics and statistics at the University of the Philippines. He is also a past president of the Philippine Statistical Association.

<sup>2</sup> The Millennium Development Goals Report 2005.

consumption, during the period from 1999 to 2001. In fact, for 2002-2003, the excess supply is close to 100% of actual consumption. The FBS is basically telling us that there is no reason for any **Pinoy** to be hungry, if only, wealth were equitably distributed, if only, those of us who had more were willing to help those of us who had much less.

Towards achieving the 1996 World Food Summit goals in the global

fight against hunger, the Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS) was established with secretariat support from the Food and Agriculture Organization (FAO) of the UN headquarters in Rome. The National Nutrition Council serves as the Philippine focal agency for FIVIMS. Thru the FIVIMS, a number of food security statistics are available on the FAO website at <http://www.fao.org><sup>3</sup> from which Table 1 was derived.

Table 1: Undernourishment in Southeast Asia

	Food Supply (kcal/person/day)			No. of Undernourished (million)			Proportion of Undernourishment (%)		
	1990-1992	1995-1997	2000-2002	1990-1992	1995-1997	2000-2002	1990-1992	1995-1997	2000-2002
Brunei Darussalam	2800	2850	2860	0.0098	0.0096	0.0111	4	3	3
Cambodia	1870	1870	2060	4.3	5.2	4.4	43	44	33
Indonesia	2700	2910	2910	16.4	11.2	12.6	9	6	6
Lao PDR	2110	2150	2290	1.2	1.3	1.2	29	28	22
Malaysia	2820	2890	2890	0.51	0.45	0.56	3	<2.5	<2.5
Myanmar	2630	2760	2880	4.0	3.2	2.8	10	7	6
Philippines	2260	2330	2380	16.2	16.3	17.2	26	23	22
Singapore	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thailand	2250	2420	2450	15.2	12.0	12.2	28	20	20
Timor-Leste	2560	2690	2810	0.0865	0.073	0.0516	11	9	7
Vietnam	2180	2380	2530	20.6	16.7	14.7	31	23	19
Southeast Asia							18	14	13
Asia & the Pacific							20	17	16

NA: not available

Source: <http://www.fao.org>

Some observations that may be noted from Table 1:

1. In terms of food availability, in 1990-92, the Philippines was ahead of Thailand, Vietnam, Lao PDR and Cambodia. By 2000-02, Vietnam and Thailand had caught up with us and Lao PDR is getting close.
2. In 1990-92, there were more undernourished **Pinoy**s than other Southeast Asians except the Vietnamese and the Indonesians. By 2000-02, undernourished **Pinoy**s were the biggest group of undernourished Southeast Asians.

<sup>3</sup> The FAO website has inconsistent figures for some of the entries.

3. In all three time periods, the incidence of undernourishment is higher in the Philippines than for Southeast Asia as a whole and for all of Asia and the Pacific. In 1990-92, the proportion of undernourishment in the Philippines was lower than in Cambodia , Vietnam , Lao PDR and Thailand . By 2000-02, only Cambodia had a higher proportion of the undernourished than the Philippines .
4. While we in the Philippines ourselves may have shown modest improvements in addressing poverty and hunger, our neighbors are succeeding at faster rates, allowing them to overtake us.

Are the statistics cited from the UN, the FAO and the Philippine Statistical System (PSS) reliable?<sup>4</sup> Are these indicators the best or the most appropriate for describing the extent of hunger? How did the UN and FAO gather or compile their statistics on poverty and hunger?

I wouldn't exactly put my *kusing* on the UN and FAO statistics but they call our attention to the challenge that faces our politicians and decision makers. It is unthinkable that what has happened to our brothers and sisters in some places in Africa will befall us but surely, we want a better quality of life for many of our children who may be unjustly and undeservingly suffering from hunger somewhere. Let us all then be conscience-stricken! Now! Let us all work for our country and for our people before it gets too late!

Whether we believe these statistics or not, to be able to serve the information needs of our development efforts, to be able to fill the hunger of many of our *kababayans*, the PSS faces the daunting challenge of generating good quality statistics on hunger! We in the NSCB commit to face this squarely.

Some social statistics like hunger and poverty are not as easy to measure

as some economic statistics like employment and prices. Thus, the development of social statistics has lagged behind economic statistics in many countries. But of course, social statistics are just as important as economic statistics and the need to measure social phenomena should receive adequate attention from statistical offices.

...social statistics are just as important as economic statistics and the need to measure social phenomena should receive adequate attention from statistical offices.

In this regard, statistical offices face a dilemma. Traditionally, national statistical agencies have been routinely collecting what may be referred to as quantitative information. The collection of qualitative information, on the other hand, has been mainly the domain of researchers and pollsters. Unfortunately for statistical offices, many users find qualitative and perception-based information more interesting. While many subjects of qualitative research are serious and are scientifically studied, the topics of qualitative data collection activities can also range from the controversial to the mundane which are fodder that feeds into the seemingly natural inclination of women and men for *chismis*. They lust for these statistics. The collection of social statistics by national statistical agencies therefore has to evolve if we are to survive the changing needs and priorities of data users.

<sup>4</sup> Metadata on official poverty statistics from the NSCB are available at <http://www.nscb.gov.ph/poverty> while those on the nutrition surveys of the FNRI are available at <http://www.fnri.dost.gov.ph>

One source of inaccuracy of statistics generated from surveys is measurement error. Measurement errors in household surveys arise for a number of reasons: questionnaire effects, data collection mode effects, interviewer effects and respondent effects. The phrasing of the question, the timing of the survey, even the position of the question in the questionnaire affects the quality of measurements. Is it proper for an NSO enumerator, for example, to ask "**Tatay, ginutom ka ba ng asawa mo kagabi**" ? Is it advisable to go to a household right after lunch and ask a visibly satiated **nanay**, "**Nagugutom po ba kayo**" ? Or can an interviewer ask a **dalagita** in the barrio in front of her mother: "**Hija, naniniwala ka ba sa pre-marital sex** ?"<sup>5</sup> They surely can contribute to measurement errors and necessary attention should be given to these aspects of data collection.

In fact, this is one reason why the public must be wary of unscrupulous opinion pollsters. These unscrupulous pollsters can conduct their survey to suit the conclusions they want; but of course there are professional pollsters who live by codes of ethics and standards. Thus, you should believe only those who are willing to open their methodologies for scrutiny by professional statisticians. And I plead to media not to irresponsibly disseminate results of such unscientific surveys because they will have become a tool to misinform and disinform the public.

“...you should believe only those who are willing to open their methodologies for scrutiny by professional statisticians. And I plead to media not to irresponsibly disseminate results of such unscientific surveys because they will have become a tool to misinform and disinform the public.”

In the meantime, while statistical offices have to learn to appreciate their role in the generation of qualitative information, there are certain realities that must be addressed and some questions that must be posed towards the systematic statistical measurement of hunger. Perception-based data are much easier to collect, but are they accurate? Quantitative estimates, on the other hand, may have sounder statistical basis but since they normally have taken statistical offices longer to collect and disseminate, are they useful and cost-effective?

Indeed, how do we measure hunger? How do we gather good statistics on hunger?<sup>6</sup>

When a person says that he or she is hungry, should we count him/her as hungry? Can we rely on the number of times that one has “full meals” in one day to determine hunger? Can looks tell if one is hungry?

Should a hunger index include availability and accessibility of food? Or should it capture only adequacy of food intake?

Some may also ask, should we, in fact, measure hunger at all?

<sup>5</sup> An actual question from the 2002 Young Adult Fertility and Sexuality Study conducted by the University of the Philippines Population Institute is “Have you ever had sexual intercourse?”

<sup>6</sup> The SWS questions on hunger are: **Nitong nakaraang tatlong buwan, nangyari po ba kahit minsan na ang inyong pamilya ay nakaranas ng gutom at wala kayong makain? Kung oo, nangyari po ba ‘yan ng minsan lamang, mga ilang beses, madalas, or palagi?** Responses **minsan lamang** and **mga ilang beses** are counted as moderate hunger, responses **madalas** and **palagi** are counted as severe hunger. Source: <http://www.sws.org.ph>

We need answers to these questions as the PSS addresses the issue of the statistical measurement of hunger. Whatever the answers are, this much I am certain - if we are genuinely interested in monitoring our gains or losses in our development efforts, it is imperative that we grew up to the realization that statistics is part of the infrastructure of the Third Millennium. Without good quality statistics, we

cannot compete with the knowledge-based economies. We therefore have to acquire genuine political will to put more investments in statistics. Will we?

Meanwhile, as part of our women's celebration in March, you might jubilate to know that the President of Harvard University, he who suggested that women might lack the capacity to succeed as top scientists, has announced his resignation! Happy Women's Month!

---

**FOR INQUIRIES:**

Regarding this report contact **TECHNICAL SERVICES DIVISION** at 527-3000 loc 317

Regarding other statistics and technical services contact **BLES DATABANK** at 527-3000 loc 317

Or Write to BLES c/o **Databank, 3/F DOLE Bldg. Gen. Luna St., Intramuros, Manila, 1002**

FAX 527-5506 E-mail: [tsd@manila-online.net](mailto:tsd@manila-online.net) Website: <http://www.manila-online.net/bles>

---