

**IUSSP Scientific Panel on  
Population Growth and Human Welfare in Africa**

**Report on the Training Workshop**

**Constructing Equity Sensitive Indicators for Accessing  
Progress of Millennium Development Goals in Africa**

**Dates: 12-14 September, 2007.**

**Venue: Windsor Hotel, Nairobi Kenya**

## **Objectives of the Workshop**

Many indicators for assessing progress in human welfare are often given as national or regional averages. In particular, targets for the Millennium Development Goals (MDGs) are set at the national level, and it is possible to achieve some MDG targets without specifically addressing equity issues. As an example, programmes can choose to focus mostly on sub-groups (e.g. wealthier people) with greatest potential to achieve gains in health-related targets. Some targets however, for example those of childhood mortality, may be more difficult to achieve without addressing equity in access to services and healthcare. The training workshop aimed to raise awareness of differentials that may exist in MDG-related indicators between different sub-groups in a country. Emphasis was on calculating indices by wealth status, urban/rural residence, by gender and possibly by geographic zones. Data from the 2003 Kenya Demographic and Health Survey were used for demonstration.

## **Specific Objectives of the workshop**

- a) To raise awareness of differentials within countries of selected MDG targets;
- b) To improve analytical skills of Africa-based junior and middle-level scholars.

## **Intended Learning Outcomes**

By the end of the course the participants were to have the following abilities:

- a) explain the rationale for monitoring equity when measuring MDG targets;
- b) know how to calculate some MDG indicators (e.g. under-nutrition, contraceptive prevalence rates, % with skilled delivery assistance) for different sub-groups;
- c) analyse DHS data using either SPSS or STATA statistical packages to produce ratios, means, and rates;
- d) prepare an outline based on their analyses to be developed into a paper/report.

## **Course Description**

This was a three day training workshop on how to construct equity-sensitive indicators for assessing progress towards the Millennium Development Goals. Participants analysed demographic and health survey (DHS) data from their countries to highlight differentials in indicators by urban/rural areas, wealth status, region, and by gender. Emphasis was given on the following indicators although other indicators were also discussed:

- a) Contraceptive use and unmet need;
- b) Child health, focusing on under-nutrition;
- c) Maternal health, focusing on access to skilled delivery.

## **Participants**

Participants were drawn from many disciplines including demography, health, and statistics. The selection of participants was based on the following criteria:

- African scientists working on issues related to the MDGs and equity issues;
- A masters' degree in a quantitative subject (statistics, mathematics, demography, economics) or a bachelor's degree in a quantitative subject with at least three years experience of data analysis;
- Junior or middle-level of their career (less than 6 years experience);
- Current experience (within past 12 months) in data manipulation and analysis;
- Some knowledge of statistical software (Epi-Info, SPSS or STATA) to the level of calculating means, standard deviations, and cross-tabulations.

The list of participants is as follows:

<b>Name</b>	<b>Nationality</b>	<b>Country and Institutional Affiliation</b>
Ezekiel Adeyemi	Nigeria	Department of Sociology, Faculty of Social Sciences, Lagos State University, Ojo Lagos, Nigeria
Joshua Arinsola	Nigeria	Sociology and Anthropology Department, Obafemi Awolowo University, Ile - Ife
Sofiane Bouhdiba	Tunisia	Faculty of Human & Social Sciences, University of Tunis
Latifat Ibisomi	Nigeria	University of Witwatersrand
Hellen Gatakaa	Kenya	Kilifi Demographic Surveillance Site, Kenya
Angelina Lutambi	Tanzania	Ifakara Health Research Centre
Catherine Mbabazi	Uganda	Population Secretariat
Angela Msosa	Malawi	National Statistical Office, Zomba
Rachel Nambooze	Uganda	Uganda Bureau of Statistics
Nelson Obirih- Opareh	Ghana	Science and Technology Policy Research Institute, Council for Scientific and Industrial Research (CSIR-STEPRI), Accra, Ghana.
Mona Tawfiq	Egypt	Cairo demographic Centre
Paul Welaga	Ghana	Navrongo Research Center, Ghana
Philippe Bocquier	France	Panel member
Nyovani Madise	Malawi	Panel member
Cheikh Mbacke	Senegal	Panel member
Akim Mturi	Tanzania	Panel member

**Facilitators** of the workshop were:

- Dr. Nyovani Madise, University of Southampton, UK.
- Dr. Philippe Bocquier, Institut de recherche pour le développement, France, and Centre for Applied Research at AFRISTAT, Mali.
- Dr. Akim Mturi, Human Sciences Research Council, South Africa.

### **Language of Instruction**

The language of instruction was English.

### **Learning and Teaching Methods**

The training used formal lectures, individual and group exercises, discussions, and hands-on computing. The programme is attached in the appendix.

## Evaluation of the Course

At the end of the course, participants were invited to evaluate the training during a discussion session. The overall feedback was that the course was very good, but as is often the case with short courses, the time was not sufficient. Workshop organizers are confident that learning outcomes (a) to (c) were achieved. Learning outcome (d) is an on-going process that will culminate in September 2008. Having hands-on computing is always a major challenge because of the many statistical packages around and, with limited time, it is not always possible to embed in the training programme a session on software. Nevertheless, the combination of Stata and SPSS expertise among the facilitators was good. In future, it would be good to prepare syntax in both packages so that the students have a choice.

## Way Forward

The workshop participants were invited to suggest the topics for further analysis and study. It was agreed that each one should do analysis of the data of their own choice and write an article/report under mentorship of one of the workshop facilitators. Those who made good progress and wrote interesting papers by mid of 2008 would be invited to attend the Panel's next activity (Seminar on Human Fertility in Africa: Trends in the Last Decade and Prospects for Change, Accra, Ghana, 16-18 September 2008). As an immediate step, the workshop agreed that the participants should submit a short concept of their intended analysis within one month to their nominated mentors who would comment. The topics that were chosen are:

	<b>Topic</b>	<b>Author</b>	<b>Mentor</b>
	Contraceptive use, birth spacing and maternal health in Nigeria	Adeyemi	Nyovani
	Trend in child mortality in Nigeria	Joshua	Cheikh
	HIV trends in North and western Africa	Sofiane	Akim
	Opportunities for responding to FP needs in Ghana	Nelson	Nyovani
	Differentials of U5 mortality by women characteristics in Kenya	Helen	Philippe
	MTCT: awareness of pregnant mothers to HIV in Tanzania	Angelina	Akim
	Factors associated with contraceptive discontinuation in Malawi	Angela	Nyovani
	Trends of child mortality over a period of 10 years in Ghana	Paul	Cheikh
	The impact of fertility and birth spacing on child mortality	Catherine	Nyovani
	Factors influencing access to maternal health services	Rachel	Nyovani
	Regional differentials of and trend in unmet need in Egypt	Mona	Akim
	Effect of the mother receiving health services on survival status of the child	Latifah	Philippe

## **APPENDIX**

### **Training Programme**

#### **Wednesday**

08.30 -09.00	Registration
09.00- 09.30	Welcome and introductions (N Madise)
09.30-10.30	Session One: Overview of Course (N Madise) Objectives, Outline, Expectations, What are MDGs?
10.30-11.00	Coffee/Tea break
11.00-12.15	Session Two: Health equity (N Madise) Inequalities and inequities, why equity matters, examples of stratifiers
12.15-13.00	Session Three: Short description of dataset - Kenya 2003 DHS DHS surveys in general, files, selected indicators
13.00-14.00	Lunch
14.00-16.00	Session Four: Basic statistics (P Bocquier) Definition of means, rates, proportions. Detecting statistical difference- refresher
16.00- 17.30	Exercises/Planning analysis for your paper

#### **End of Day One**

#### **Thursday**

08.00-09.00	Session Five: Review of Day One
09.00-10.30	Session Six: Contraception and concept of unmet need (A Mturi)
10.30-11.00	Coffee/tea break
11.00-12.00	Session Seven: Disparities in unmet need (A Mturi)
12.00-13.00	Session Eight: Confidence intervals (N Madise)
13.00-14.00	Lunch
14.00-15.30	Session Nine: Child health indicators (P Bocquier) Disparities in Under-five mortality
15.30-16.00	Coffee/tea
16.00-17.30	Hands-on computing (A Mturi/P Bocquier/N Madise)
19.0	Group dinner

#### **End of Day Two**

**Friday**

08.00-09.30	Session Ten: Review of Day Two
09.30-10.30	Session Eleven: DHS StatCompiler (N Madise)
10.30-11.00	Coffee/tea break
11.00-13.00	Session Twelve: Maternal health (N Madise) Maternal health indicators, concept of MMR, Equity in skilled birth attendants
13.00-14.00	Lunch
14.00-15.30	Hands-on computing (A Mturi/P Bocquier/N Madise)
15.30-16.00	Coffee/tea
16.00-17.30	Discussion of computing
17.30-18.30	Discussion: Further work – Finalizing analysis plan
18.30-19.00	Course Evaluation

**End of Course**