



4TH ISIBALO YOUNG AFRICAN STATISTICIANS CONFERENCE NEWSLETTER



2 August 2014

"Young African Statisticians Staking Their Claim in Unleashing the Power of Statistics in Exposing and Disposing of Inequality Post-2015"

Where to from here?

Day 2 of the 4th IYASC took a different angle to a conventional session. The session was scheduled as a report back from the Uganda Country Chapter of the YAS on their activities. The session chair, Dr Miranda Mafafo, the person responsible for the founding of the IYAS programme, asked some tough questions of the gathered YAS.

Uganda, Rwanda and Ethiopia presented on their country experiences, and a YAS currently doing a research fellowship at the UNECA (Gloria Mathenge, who was featured yesterday), spoke passionately about the need for the IYAS programme to be properly organised so that when opportunities are made available for internships and fellowships, they are drawn pool of identified YAS.

Mr Luqmaan Omar, the discussant for the session, spoke of the importance of capacity building on the continent. He encouraged YAS to organise themselves systematically and synchronically; to get involved in statistical activities in their countries, particularly censuses, and to act as ambassadors and champions for these programmes. He informed the YAS that, due to their knowledge, they are better positioned than most to fulfil this role.

The role of the YAS is not simply to write papers and present at conferences. They should be partners in publicising and advocating for statistical programmes in their country. Mr Omar then advised that in the inter-conference period, YAS should organise their country chapters and build partnerships with their National Statistics Offices, in order to ensure that statistical capacity in their country is strengthened.

Dr Mafafo ended the session by asking how the IYAS programme can ensure that it impacts on the continent in terms of policy and evidence-based planning. Leaders need to be groomed in specialist thematic areas (cohorts) such as Civil Registration and Vital Statistics or economics so that, when distinguished statisticians such as Prof Ben Kiregyera eventually retire, the baton



can be passed and not dropped. Countries should develop excellence in a particular area that is relevant to themselves, based on their country priorities.

Dr Mafafo pointed out that the IYASC programme needs to chart a clear path for itself that will enable Africa to say that we have a unique programme that builds young statisticians. The YAS who are part of the programme should stand head and shoulders above their peers, as they would have had the opportunity to develop a higher level of professionalism due to their exposure to the greater statistical community.

Dr Mafafo then assigned countries the task of examining the IYASC strategic plan and identifying inter-conference activities that speak to both the African and their national statistics agendas. A draft work programme up to 2016 should be compiled, which should answer the question as to why a 2016 conference is needed, what value it will bring and what support is needed to have it happen.

The 4th IYASC will chart the way forward for the IYAS programme on the continent.



The South Africa I know, the home I understand





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FOR THE POST-2015 DEVELOPMENT AGENDA what constitutes 'extreme poverty' is a hot topic.

It is agreed that the poorest of the poor - the *destitute* - should not get left behind

BUT HOW DO WE KNOW WHO THE DESTITUTE ARE?

With the *Global Multidimensional Poverty Index*, the picture quickly becomes *uncomfortably clear*

Meet Aruna

- She lives with a family who were affected by her husband and 4 children
- Her husband leaves her no money or water
- They eat a *pay-as-you-eat* but can only afford to buy maize and beans for the children and her husband
- Aruna sells flower garlands on the road and her husband sells a 2-wheel motorcycle on the side of the road. They have no money, food or fuel, they worry that others will steal what they have
- When they go to bed hungry

POVERTY HAS MANY FACES

LACK OF INCOME POOR HEALTH CARE OVERBURDENED SERVICES POOR EDUCATION UNCLE WATER TO NAME A FEW

The Global Multidimensional Poverty Index (MPI)

It is a new measure of poverty that looks at more than just income. It looks at health, education and living standards.

3 DIMENSIONS OF POVERTY 10 INDICATORS OF POVERTY

Health Nutrition Child Mortality

Education Years of Schooling School Attendance

Living Standard Cooking Fuel Electricity Access

A PERSON IS POOR IF HE OR SHE IS DEPRIVED 1/3 OR MORE OF THESE WEIGHTED INDICATORS

THESE 1.6 BILLION ARE POOR IN 108 COUNTRIES.

ARUNA IS ONE OF THEM

BUT ARUNA IS NOT JUST POOR. SHE IS DESTITUTE

THE GLOBAL MPI MEASURES MORE THAN POVERTY - IT CAN MEASURE DESTITUTION

THE DESTITUTION MPI FOCUSES ON THE POOREST OF THE POOR BY USING MORE EXTREME CRITERIA

POOR DESTITUTE

IF NOBODY IN YOUR HOUSEHOLD HAS HAD 5 YEARS OF EDUCATION

IF A CHILD IN YOUR HOUSEHOLD HAS DIED

IF YOU DON'T HAVE ADEQUATE SANITATION

IF NOBODY IN YOUR HOUSEHOLD HAS HAD EVEN 1 YEAR OF EDUCATION

IF TWO OR MORE CHILDREN IN YOUR HOUSEHOLD HAVE DIED

IF YOU PRACTISE OPEN DEFECATION

WHO ARE THE DESTITUTE?

IN 49 COUNTRIES COVERING A TOTAL POPULATION OF 2.8 BILLION PEOPLE IN THE WORLD

1.2 BILLION ARE MPI POOR 50% OF MPI POOR ARE DESTITUTE

HOW ARE THEY DESTITUTE?

67% live in a household with severe undernutrition

41% live in a household that has lost 2 children

90% have to defecate in the open

69% live in a household with no electricity or a mobile phone or a radio

WHERE DO THEY LIVE?

THE MAJORITY OF THE WORLD'S DESTITUTE LIVE IN SOUTH ASIA AND SUB-SAHARAN AFRICA

INDIA HOUSES THE LARGEST NUMBER OF DESTITUTE PEOPLE - AROUND 340 MILLION

IN NIGER, 68% OF THE POPULATION ARE DESTITUTE. IN ETHIOPIA, IT'S 58%

DESTITUTION IS MORE PREVALENT IN RURAL AREAS IN MOST COUNTRIES

THE GOOD NEWS

Destitution is falling over time

Almost all countries reduced destitution faster than multidimensional poverty

Low Income and Least Developed Countries did best at tackling destitution

Top performers are:

ETHIOPIA NIGER GHANA BOLIVIA

The Ethiopia Story

2008-2011

30% points

From 2000 to 2011, Ethiopia reduced the proportion of destitute people by 30% points

Progress was faster in the first five years than in the second half of the decade

Destitution in all indicators was reduced. The most powerful improvements were achieved in:

Years of Schooling School Attendance Nutrition

THE GLOBAL MPI IS AN IMPORTANT TOOL TO MEASURE AND TACKLE... NOT JUST POVERTY BUT ALSO DESTITUTION

For more information on the Global MPI, including data, analysis and policy advice, please visit <http://www.ophi.org.uk/multidimensional-poverty-index/>

For more information on the Oxford Poverty and Human Development Initiative please visit <http://www.ophi.org.uk/>

Poverty: An international picture

Ms Adriana Conconi, from the Oxford Poverty and Human Development Initiative (OPHI) at the University of Oxford in the United Kingdom gave a presentation on the 2014 Multidimensional Poverty Index (MPI 2014). The global Multidimensional Poverty Index (MPI) is an internationally comparable measure of acute poverty covering over 100 developing countries. It complements traditional income-based poverty measures by capturing the severe deprivations that each person faces at the same time with respect to education, health and living standards.

Some key findings from the 2014 MPI are as follows:

- The MPI 2014 covers 108 countries, which are home to 78% of the world's population. Thirty percent of them – 1.6 billion people – are identified as multidimensionally poor
- Of these 1.6 billion people, most live in South Asia (52%), followed by Sub-Saharan Africa (29%). Most MPI poor people (71%) live in Middle Income Countries
- Of the 1.6 billion identified as MPI poor, 85% live in rural areas; significantly higher than income poverty estimates of 70 to 75%
- Nearly all countries that reduced MPI poverty also reduced inequality among the poor
- Of 34 countries for which changes over time were studied, 30 – covering 98% of the poor people across all 34 – significantly reduced multidimensional poverty

In 2014, OPHI released a new measure of destitution. A person is destitute if he/she is deprived in at least one-third of the same weighted indicators, but according to more extreme criteria than those used to identify the MPI poor - such as having lost two children, or having no one with at least one year of schooling at home.

- Across the 49 countries analysed so far, half of all MPI poor people are destitute
- Two-thirds of destitute people have someone with severe malnutrition at home. Over 80% have a dirt floor and over 90% practise open defecation to relieve themselves
- India is home to 343,5 million destitute people – 28,5% of its population. Overall in South Asia, over 420 million people are destitute
- In Niger, 68,8% of the population is destitute – the highest share of any country
- 8 of the top 10 performers at tackling destitution over time were Low Income or Least Developed Countries

Several countries, including South Africa, have used the Global MPI as a base to develop individualised MPI's. The South African MPI (SAMPI) was released earlier this year.

More information on the Global MPI can be sourced from their website: <http://www.ophi.org.uk/multidimensional-poverty-index/>





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Slum dog millionaire — What are the chances?

Adrien Kouanda Deungoua of Cameroon presented a paper examining living conditions in urban areas of Cameroon, with a particular focus on slum dwellers and what factors increased the likelihood of living in a slum.

A slum was defined as a contiguous settlement where inhabitants are characterized as having inadequate housing and basic services. Some identifying characteristics are insecure residential status; inadequate access to safe water; inadequate access to sanitation and other infrastructure; poor structural quality of housing; and overcrowding.

Utilising data from the third Cameroonian Household Survey conducted in 2007, and concentrating on urban households, Mr Deungoua's research found that 43,5% of urban households lived in areas that could be classified as slums.

In terms of the characteristic of household heads who lived in slums, 26% of those living in slums had no education or completed primary school education; 68% of them were male; 61% were employed in the informal agriculture sector; and 41% were aged less than 30 years.

Further analysis showed that education, age, gender, socio-

economic group, city, and standard of living were significant variables in terms of determining the likelihood of a household head living in a slum.

Household heads with no education were five times more likely to live in a slum compared to those with higher education; those who were employed in the informal agriculture sector were three times more likely to live in a slum than those employed in the public or private sectors; and males were 1,2 times more likely to live in a slum than females.

Households who lived under the poverty line were 2,5 time more likely to live in a slum; those headed by households aged 30 – 60 years were also more likely to be living in a slum.

These findings allowed Mr Deungoua to suggest the following policy interventions:

- To pursue the development of infrastructures and services of the cities and in urban areas in general
- To give the prominence to women in programs and policies that aim to ameliorate inadequate living conditions
- To reinforce policies that aim at structuring the informal agricultural sector and alleviating the poverty incidence in this sector
- To pursue and reinforce literacy policies



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Child mortality in Ethiopia



Senayit Seyoum and Eshetu Wencheko of Ethiopia presented a paper on the Determinants of Mortality Among Children of Age One Up to Five in Ethiopia. The study aimed to investigate the causes of child mortality; assess the relationship between the risk factors and child mortality; and suggest valuable strategies to reduce child mortality in Ethiopia.

The analysis was based on data from the 2011 Demographic and Health Survey (DHS) for Ethiopia. The study found that children born to women not currently married, first born children, multiple birth, children born within 18 months of the previous birth and children who were breastfed less than 6 months were exposed to a high risk of infant and child mortality.

Editorial team

Editor-in-chief: Trevor Oosterwyk
Editor: Tracy Daniels
Production: Cheryl Taylor, Lungani Skosana
Photography: Mbongiseni Mndebele
Contributors: Kevin Parry, Kgaugelo Motloutse, Deborah Pillay, Vienie Botha, Oteng Makgotlwe, Faizel Mohammed

Socioeconomic variables that have a significant effect included household size and, to some extent, the education level of fathers and mothers and sex of the head of the household.

Children born in households with fewer people, children born in male headed households, children born to mothers and fathers with no education and to some extent children born to mothers and fathers with primary education are exposed to a high risk of infant and child mortality.

Infants and children born to mothers with secondary or higher education have greatly improved chances of surviving, 95 and 97 percent respectively. Infants and children residing in urban areas have, on average, better chances of survival than those in residing in rural areas.

‘Socioeconomic variables that have a significant effect included household size and, to some extent, the education level of fathers and mothers and sex of the head of the household’



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Converting data into knowledge

Making statistics more accessible is a key goal of any statistical organisation that wants to reach a greater number of users and enable them to understand sometimes complex data in a short period of time. Visualisation of data was shown to bridge this gap.

The key aspect of visualization is the ability to move data along the value chain towards meaning and finally information. The presentation, by Mahmoud El-Sarawy from Egypt, emphasized that visualisation provided the benefits of clarity; time saving; avoiding confusion; and an aesthetic appeal due to the more engaging nature of the visual format.

A breakdown of a visualization in the form of an infographic was given to show how a number of information elements can be incorporated within a single page to convey a large amount of information, with easily digestible facts and graphics.

It is clear that time pressures on decision makers require organisations to capture the attention of the reader, which

may then lead to more in depth interrogation of the data.

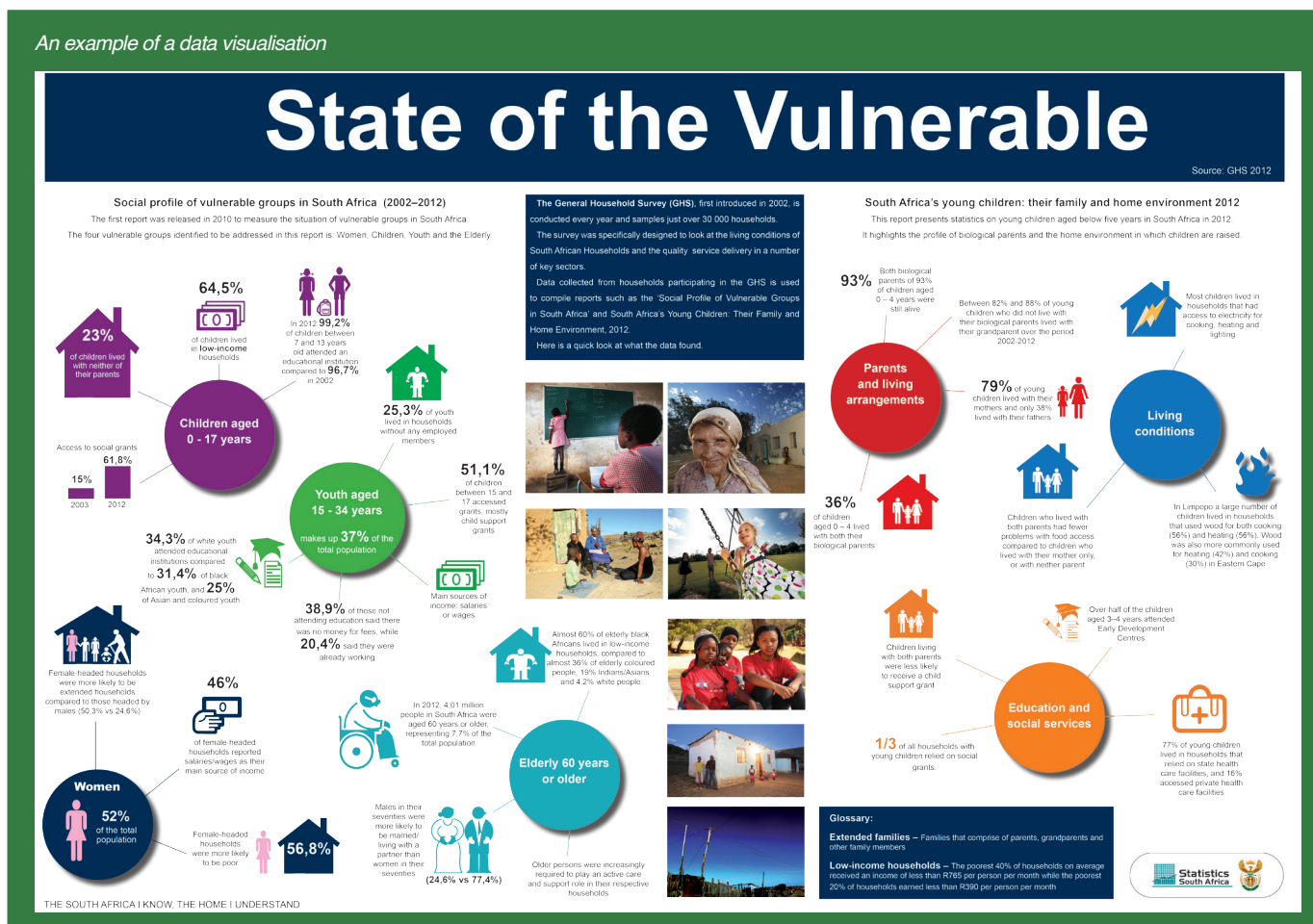
The social nature of visualisations was also examined, with technology enabling the ability to quickly share a visualization amongst friends or colleagues, exposing the information more quickly and creating new opportunities for its use.

The presenter quoted the fact that “loved data lives longer”. Visualisation is key to increasing the love and appreciation of the work of statistical organisations.

Various open source tools were also mentioned that would allow the audience to capacitate themselves in future visualisations of their own data.

The democratization of data has been a key talking point. Visualisation of data can be a key tool in taking data out of statistical publications and into the common discourse of the day, informing, enlightening and becoming a key driver of action.

An example of a data visualisation





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Tips for scientific writing

‘But in science the credit goes to the man (or woman) who convinces the world, not to the man (or woman) to whom the idea first occurs.” — Sir Francis Darwin

The structure of scientific papers

Structure is absolutely crucial to scientific papers. Most scientific papers are split into five main sections: introduction, literature review, methods, results and discussion.

Title

The title should embody either the aim or the conclusion. Catchy titles are good, but it can be difficult to make them work, and they still need to indicate their subject and the conclusion or aim.

Abstract

The abstract should summarise your entire paper, including your main findings and the importance of your results. All this should be done using no more than 200 to 250 words. It is important to note that most readers will only read the title and abstract of your paper so it is important to get these parts right.

Introduction

You need to grab the reader's attention and convince them that it is worth reading the rest of your paper. The introduction should be a brief summary of the research problem or question, the methods used, and the main finding.

Literature review

A careful historical examination of the body of literature provides the reader with a broad introduction of what has been done so far by other researchers. It should identify a gap or unanswered question in the field that you will attempt to tackle in your paper. The review should lead to your research question.

Methods

This section should cover your methodology. It should be a step-by-step guide on what you did, providing enough detail to enable someone else to repeat your work. Include information on the software and/or equipment that you used.

Results

This section presents your results but excludes any discussion. Include figures and tables here. As a rule of thumb, figures are preferable to tables. You should avoid repeating data in both tables and figures, or in tables and text. Avoid three-dimensional graphics.

Discussion

This section tells us what your results mean, why they are important and how they fit in with existing knowledge. Be clear and specific about the interpretation of your results and the implications of your work.

The discussion is also where you point out alternative explanations for your findings and argue why you think your interpretation is the best. You should also mention possible limitations of your study.

The final paragraph should tell us your conclusions – what your take-home message is. If you wish to recommend further work, state what needs to be done and who should do it.

References

You need to list all the references you have cited in your text, using a common system of referencing (e.g. Harvard).

It is very important to ensure that the referencing is absolutely correct. The list of references is extremely useful for the reader as it acts as the gateway to other studies or work that the reader might want to follow up on.

There is nothing more frustrating to the reader than sloppy referencing as it makes it more difficult for the reader to follow up on other papers or work that you may have mentioned.

Sources: http://www.tropical-biology.org/admin/documents/pdf_files/Writing%20guides/Scientific%20Writing_FINAL.pdf

<http://www2.uncp.edu/home/acurtis/Courses/ResourcesForCourses/LitReview.html>

