

THE VALUE OF STATISTICS IN AFRICA

Mitonga Kabwebwe Honoré and Isak Neema ¹

Faculty of Health Sciences, Department of Community Medicine, University of Namibia, Windhoek, Namibia
Faculty of Sciences, Department of Statistics, University of Namibia, Windhoek, Namibia

ABSTRACT. Statistics plays an important and vital role in every domain of human activity. Thinking about numbers is becoming so critical that in all facets of the society, people in academia, business and governments need to rely on data in order to take optimal decisions.

Despite the high demand of statisticians and data analyst in Africa, there is a persistent concern that African students are not pursuing degrees in statistics at under and post graduate levels in sufficient number to meet the demand and developmental challenges Africa is facing.

Thus in order to address multi-sectorial challenges in Africa, we call for efforts to enhance awareness of careers in statistics and related analytics fields among high students throughout Africa. Also, there is a need to systematically document the current and future needs for statisticians in Africa.

Résumé (By the Editor): Les statistiques jouent un rôle important et vital dans tous les domaines de l'activité humaine. L'utilisation des données dans la gestion de tous les aspects de la société est devenue si cruciale et importante que les universitaires et chercheurs, les hommes d'affaires et les gouvernements ont impérativement besoin de données fiables pour prendre des décisions optimales.

En dépit de la grande demande en statisticiens et d'analystes de données, il y a toujours une grande et persistente inquiétude de voir que les étudiants poursuivant des études supérieures statistiques, ne sont pas suffisamment nombreux pour combler le déficit.

En vue de prendre en charge les nombreux défis multi-sectoriels en Afrique, nous lançons un appel pour réhausser la place et l'envergure des supérieures en Statistiques, du premier au troisième cycle, pour tacler ce défaut. Il y a aussi un constant besoin de documenter les besoins aussi bien actuels et futurs en statisticiens africains.

Keywords: Data, Importance of Data, Training in Statistics, Africa, International Year of Statistics.

AMS 2010 Subject Classification: 62-00

Copyright © 2014, African Journal of Applied Statistics. All rights reserved

Article history: Received 2014/01/01; Accepted 2014/10/30; Published Online 2014/11/30.

The American Statistical Association, the United Nations (UN), International Statistical Institute (and the Bernoulli Society), the Royal Statistical Society, the Institute of Mathematical Statistics and the International Biometric Society have declared the year 2013 as the International Year of Statistics. This declaration was a worldwide initiative that was aimed at promoting the importance of Statistics in finding solutions to global challenges. Furthermore it was aimed at increasing the general knowledge about the important role Statistics plays in all aspect of society, nurture Statistics as a profession, especially among high school and college students as well as promoting creativity and development in the sciences of Probability and Statistics. The International Year of Statistics was celebrated in many different events in more than 122 countries with over 2000 international organizations, professional Statistical societies, colleges and Universities, primary and secondary schools, businesses, government entities

and research institutes taking part. This is because Statistics have a powerful and far-reaching effect on everyone and play vital role in every domains of human activity. The Statisticians, the scientists who collects and analyze the data, work in many areas that touch our everyday lives, including medicine, economics, agriculture, business, law enforcement and weather forecasting, just to mention a few. It is against this background that Statistics is becoming more critical as academia, businesses and governments around the world come to rely on the data driven decisions, greatly expanding the demand for Statisticians.

In an African context, we are observing an increase of enormous amounts of data but millions of African people still do not have a good understanding of the value of statistical science as said by the American Statistical Association Director

¹Corresponding author: (M. T. Honoré): honoremitonga@gmail.com
Faculty of Health Sciences, Department of Community Medicine. Tel numbers: +264 612065013 (office), +264 856056256 (Cell); Fax: +264 61254130
Co-author : I. Neema, icekhuse@yahoo.com, ineema@unam.na. University of Namibia, Windhoek, Namibia. Tel numbers: +264 612065013 (office), +264 856056256 (Cell); Fax: +264 61254130

Ronald L. Wasserstein: or most people, statistics remains an invisible science [Wasserstein] (2013). In the last couple of decades, there has been a sharp increase in the demand for statistical data to analyze African's developments. The follow-up systems of the new programs for Africa's development such as the Millennium Development Goals (MDG), the strategy frameworks for poverty reduction and the New Partnership for Africa's Development (NEPAD) [MDG Report] (2012) and [NEPAD] (2011), created new demands and frameworks to de synthesize the demands for statistics. It is therefore against this background that the African Statistics Day was then adopted in May 1990 by the Twenty-fifth Session of the United Nations Economic Commission for Africa (UNECA) and the Sixteenth Meeting of the African Ministers responsible for Economic Planning and Development to be celebrated on the 18th November annually with an objective of promoting awareness among political decision-makers, the private sector, civil society and the general public in the fundamental role of statistics in the formulation of economic and social development policies, their implementation strategies and consequently their monitoring and evaluation thereof. The Statistical community in Africa has then commemorated this day on an annual basis since 1993. [African Centre for Statistics] (2006)

In Namibia, the Government has created the Development Master Plan which is the Vision 2030 implemented through a series of National Developmental Plans (NDP). [National Planning Commission] (2004) It further recognizes the strategic importance of relevant, high quality and timely statistics for evidence-planning and decision making in order to successfully achieve the objectives of Vision 2030 and hence the creation of the Namibia Statistics Agency (NSA) in 2011 through the act of Parliament. The priorities of NSA were aligned to be consistent with the Government objectives over the next five years as outlined in the fourth National Development Plan (NDP4). [National Planning Commission] (2012) In addition, NSA plays multiple roles as a sector leader for the National Statistics System (NSS) as well as major producer of the country official statistics needed to report on Namibia progress. It is these roles that enable the NSA to provide leadership and expertise in measuring the policy impact and public sector performance. To date, besides other sectoral report the NSA has successfully released the 2011 Population and Housing Census report and conducted and released the much anticipated 2012 Labour Force Survey report.

In response to the demand for statisticians and data analysts which is expected to increase by 4.4 million jobs worldwide in the years ahead [Wasserstein] (2013) and the persistent concern that African students are not pursuing degrees in statistics at under and postgraduate level in sufficient number to

meet the demand and the developmental challenges Africa in general and Namibia in particular are facing, government institutions of higher learning such as the University of Namibia (UNAM) and the Polytechnic of Namibia (Polytech) have established dedicated departments (Statistics and Population Studies (UNAM) and Mathematics and Statistics (Polytech)) that introduces and train students in statistics and population studies at both under and postgraduate level for the national and international market. In addition, they also offer tailor made courses that aimed to upgrade and improve the analytic capacities of the staffs in the government agencies.

Therefore in order to address multi-sectorial challenges in Africa, we call for efforts to enhance awareness of careers in statistics and related analytics fields among high school students throughout Africa in general and throughout Namibia in particular. There is also a need for systematic effort to document current and future work force needs and assess the adequacy of pipeline to meet these needs. Furthermore, there is a need for African statisticians and their developmental partners to work in close cooperation, maintaining and reactivate structures among statisticians established at the sub-regional and regional levels such as the Committee on Development Information (CODI) and the Advisory Board on Statistics in Africa (ABSA).

REFERENCES

- Ronald L. Wasserstein, 2013. International Year of Statistics Kicks Off. *AMSTATNEWS The Membership Magazine of the American Statistical Association* 1, February.
- MDG Report, 2012. Assessing Progress in Africa toward the Millennium Development Goals. by *AUC, UNECA, AfDB and UNDP*. Available at: <http://web.undp.org/africa/documents/mdg/2012.pdf>.
- NEPAD, 2001. The New Partnership for Africa Development. <http://www.un.org/africa/osaa/reports/nepadEngversion.pdf> 1, Abuja, Nigeria, October 2001..
- African Centre for Statistics, 2006. The Reference Regional Strategic Framework for Statistical Capacity Building in Africa - Better Statistics for Improved Development Outcomes. http://www.uneca.org/sites/default/files/publications/stat_rrsfdocument_final.pdf, Economic Commission for Africa, February 2006a
- National Planning Commission, 2004. Vision 2030 Policy Framework for Long-Term Development. *Office of the President* 1, Windhoek, Namibia 2012.
- National Planning Commission, 2012. Namibia Fourth National Development Plan. Available at : http://www.gov.na/documents/10181/14226/NDP4_Main_Document.pdf/6a57bd4f-a1ff-4aa5-9bd1-264e4a3e1e1a