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Implications of Decentralization on Statistical Training – The Role of ISAE and UBOS

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I was invited by the Uganda Bureau of Statistics (UBOS) and the Ministry of Agriculture, Animal Industry and Fisheries to a 2 day workshop on “*Planning an Annual Agricultural Production System for Uganda*” at which I make remarks on the implications of decentralization on statistical training. In my view, capacity for Agricultural statistics in Uganda in terms of institutional arrangement, trained personnel and methodological development is rather limited. This in turn limits the capability of the agricultural statistics system to meet user data needs. So how do we build a robust, self-sufficient and sustainable national capacity for production of agricultural data? With decentralization, these limitations become even more pronounced.

Decentralization implies increase in demand for quality data which comes with a need for institutional changes. The first step in making such institutional changes would be to develop a national statistical manpower development plan giving the planned output of statistical and data processing personnel at different levels of training.

The second step is to have statistical training institutions develop statistical capacity at different levels of local government by including in their

training programs a sub-national orientation that caters for training demands of statistical personnel in local government. There is need to develop tailor-made curriculum to meet the different training needs for different levels of staff working in the districts planning units and line ministries. To inform this process, a training needs assessment should be conducted to find out basic skills requirements and to document best practices of other institutions in the region that are already providing such training. This more focused training may to some extent help address the problem of the very low speed with which data moves from the lower administrative units (sub-counties) to the districts.

Currently at ISAE, training in Agricultural statistics is offered for the Bachelor of Statistics, postgraduate diploma in Statistics and Master of Statistics programmes respectively. At graduate level, there are no fellowships that ISAE could use to influence students on areas of specialization. Short term courses and workshops are also offered to meet specific skills needs. Currently, ISAE is reviewing its programmes to make them more relevant to the information needs under different arrangements, decentralization being one of them. Modularization of teaching programmes will enable ISAE provide short-term, competency-based, on the job and off the job training. E-learning will be used to build a critical mass of skilled and trained staff in the shortest possible time.

It is important to also strengthen the field attachment programme for the students which had worked very well when ISAE was supported by

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UBOS to place the students in the districts and sub-counties. This has proved very beneficial to the students who get to know how local governments at different levels operate. It has also helped ISAE appreciate the demands of local governments and other stakeholders and the quality of graduates they want in order to meet these demands. It is necessary to widen the collaboration to include more data users who can then provide places for field attachment.

It is hoped that decentralization will open up new recruitment opportunities for the different applied areas of statistics so that students are encouraged to specialize in these areas.

The third important thing is to develop and/or strengthen partnerships between academic statisticians from universities and training centres and official statisticians working at UBOS and other data producers and users. One thing to note is that many statistics departments in universities do not teach official but rather theoretical statistics. Scaling up partnerships and interactions between academic staff at ISAE and official statisticians at UBOS enhances the relevance of statistical training at ISAE. Practical and applied courses e.g. index numbers, trade statistics and agricultural statistics could be taught by senior and experienced staff from UBOS and other data producing agencies as well as users on a part-time basis so that the students are exposed to practical and applied aspects of these subjects. The Plan for National Statistical Development PNSD encourages such relationships.

ISAE and UBOS can together organize on-going, structured, tailor-made, in-service training courses for middle-level and junior cadre staff as well as refresher courses and/or specialized training courses for serving statisticians.

Fourth important component of capacity building is the development of methodologies for data collection, analysis, reporting and dissemination. Areas of methodological research need to be identified.

Financial and Technical support is necessary to enable implementation of these training initiatives and specifically:

- Fellowships for both trainers and trainees
- Research and development of appropriate methodologies (low cost, simple to apply, yet give reasonably accurate data)
- Physical infrastructure i.e. lecture rooms, seminar rooms, laboratories, libraries
- Development of guide syllabi and production of relevant teaching materials
- Visiting lecturers to cover the gaps in expertise or those created by trainers who may be away on study leave
- Equipment and accessories

HEALTH CORNER: RECOGNIZING A STROKE

STROKE: Remember the 1st Three Letters.... S. T. R. which constitute a criteria for analysis of stroke.

A neurologist says that if he can get to a stroke victim within 3 hours he can totally reverse the effects of a stroke. He said the trick was getting a stroke recognized diagnosed and then getting the patient medically cared for within 3 hours which is tough. Sometimes symptoms of a stroke are difficult to identify. Unfortunately the lack of awareness spells disaster. The stroke victim may suffer severe brain damage when people nearby fail to recognize the symptoms of a stroke.

Now doctors say a bystander can recognize a stroke by asking three simple questions:

- S* Ask the individual to SMILE.
- T* Ask the person to TALK and SPEAK A SIMPLE SENTENCE (Coherently) (i.e. It is sunny out today.)
- R* Ask him or her to RAISE BOTH ARMS.

If he or she has trouble with ANY ONE of these tasks call emergency number immediately and describe the symptoms to the dispatcher.

New Sign of a Stroke "Stick out Your Tongue"

Ask the person to 'stick' out his tongue... If the tongue is 'crooked' or if it goes to one side or the other, that is also an indication of a stroke.

On Measuring Democracy, Governance and Human Rights by *Wesonga Ronald*

The magnitude of statistics should not be limited by only what is taught in class, rather there is a great need to attempt looking outside the black box. Participating in the workshop at Windhoek, Namibia from 3rd – 16th October 2007 that was organized and funded by the InWent Centre for Economic, Environmental and Social Statistics was an eye opener of how wide and broad statistics can be. The theme was “On Measuring Democracy, Governance and Human Rights” and managed by Dr. Uwe Singer. At first, I wanted to turn down the offer to attend reasoning that I have nothing to do with political issues since at no time have I ever dreamt of even being an LC I Chairman and worse still, although it is my right, I have never voted! Agnes, Abraham and I thought we were going to learn more about Democracy, Governance and Human rights aspects, but instead went through the application of statistics.

It was not long after introductions that Dr Ken Mease of the University of Florida and University of the West Indies, Trinidad introduced the *Statistics Camp* and this took the lion’s share of the time as he led us through surveys, data quality and measurements. Some of the survey types he introduced that of course seemed unique from what you learn from the sampling class include:

- Country reports
- Cross-comparative surveys
- Expert assessments
- Expert panel
- Household survey
- Mass opinion survey
- Media Indicators
- Business surveys

I guess you may be wondering the theoretical linkage of this kind of survey type classification, but

the truth is that these types are generated from the practice of statistics. It does not matter whether it is you, the Statistician or otherwise practicing it, but comes as a result of the need to see statistics at work.

The workshop advanced and stochastically need arose of practicing what we had learned. As participants put it, “talking statistics is one thing, practicing it and bringing it to live, is another – at times quite exhausting, but equally exciting issue.” After ten days of theoretical and practical work, the trainees were asked to split up into groups, put on their walking shoes and do a comparative household survey in three different parts of the Namibian Capital, Windhoek: Klein Windhoek, a residential area; Windhoek West, with a lot of middle-class citizens and Katutura, an area consisting of poorer neighborhoods. “Are you happy with the delivery of public services like water, sanitation, electricity and garbage collection?” was the overall question to ask the citizens of the different parts of the city. “How do you consider the performance, fairness, responsiveness, participation and accountability in the provision of these services?”

What seemed to be an easy task at first glance, turned out to be challenging – for various and sometimes unforeseen reasons. For example, I was in the group that walked out to Windhoek West. We were very early and we were confronted with a late waking up in that area. We had to deal with vicious barking dogs of all shapes and sizes. We spent most of the first hour ringing in vain several gate bells and hoping that the fences were strong enough to restrain the barking dogs. Some of the residents, mainly of European descent, did not even realize that this was a household survey, they thought, Africans knocking on doors during a weekend are simply seeking for servants jobs whereas others were reluctant to answer the questions.

We learnt that every household survey should be announced and advocated properly in advance, in order to be most successful and effective. Despite these difficulties, the comparative data collection exercise was an enriching experience, according to

the participants. They also appreciated that they were greatly involved in the data entry, analysis and interpretation. Donald, a lawyer and one of the Ugandan participants put it this way "This was truly Statistics in Motion!" The interesting part however, was that Wesonga; the Ugandan participant from ISAE took over as a facilitator towards the end of the workshop as he handled the nasty parts of data management and analysis aspects of Measuring Democracy, Governance and Human Rights.

Watch this space because more interesting aspects are yet to come from the Beijing Conference!

What does "nine years" mean to the Bachelors of Science in Population Studies? By Lwanga B. Charles

Nine years may sometimes mean nothing or not much when compared to 40 years' history of ISAE. Nine years mean everything in case one considers short but dramatic history of the Bachelors of Science in Population Studies (BPS). Soon after its initiation, the programme expanded in size from 78 undergraduate students to 177 now; and this has made the Institute and the Department of Population Studies in particular an important International Centre of exchange of intellectual values among scholars, professors and students. In its short history, we have witnessed better and worse periods. As a matter of fact, for the past eight years, 438 professionals in the field of population studies have graduated from the programme, and some of whom have completed their postgraduate degrees in a related field; and in the current academic year about 70 students will be able to graduate. Thanks to the faculty members who initiated the programme, almost everyone was anxious about how it would run in the highly competitive world.

Now, after these first eight years we can say that the idea was excellent because it has led to significant and valuable increase in the International dimension of education in Uganda. This has been possible due to courageous vision of the initiators and daily hard work of the faculty authorities, lecturers, partners,

administrative officers, the Institute's Office team and last but not least, students representing more than five countries from the region. We wish to commemorate the very first eight years of history of the BPS programme.

57th ISI Session of the ISI Conference Experience: Permanent Landmark for my Publishing Career by Wandera Stephen Ojiambo

I attended the 57th Session of the ISI in Durban, South Africa from 16th-22nd August 2009. My experience was a mixed grill. I left for Durban on 13th August via Johannesburg. I spent a night in Johannesburg and left for Durban by bus the next day. I had a terrible headache for 24 hours. I couldn't get medicine at that time. Mr. Lubaale prayed for me and I recovered slowly but surely. I drank a lot of natural fruit juice while I was in SA.

I presented a paper entitled, "Spousal Sexual Violence and Sexually Transmitted Diseases among Ever-Married Women in Uganda". It was a very excellent presentation because it had the input of Professor Lehana Thabane, Professor Ntozi James, Mr Jumanyol Kennedy and many others. After my presentation, Professor Clifford (Editor-in- Chief) requested for my paper to be sent for publication in the African Population Studies Journal. I sent the paper immediately. He sent it to three reviewers who sent back their comments to him. I received copies of comments and integrated them in the manuscript. I was told that the revised manuscript is fine. I am awaiting proof-reading and final publication of the paper.

I am forever grateful to the support I received from Statistics South Africa and the Young Statisticians Programme. They sponsored every aspect of the conference requirements. I also acknowledge the support of ISAE during this time.

What then are statistics?

By Wesonga Ronald

In the previous, first ever successfully launched ISAE Newsletter, we made an attempt to understand what statistics is all about. Thanks for the compliments from all readers especially about

the article '*statistics aren't just figures*', may God bless you to read even more!

Let's make an attempt to define statistics without reservations. Statistics is all encompassing and therefore, it would be egotistical to restrict its definition to only quantitative aspects. In the beginning when the author of this article was growing up as a young statistician in a remote village, his teachers in primary school by then sarcastically didn't know the existence of statistics. They simply knew mathematics, and other subjects like science and social studies! Someone has just told me here that even up to now, mention of statistics begins somewhere after primary education level. Corollary, the beginning of statistics in Uganda comes after a child is a teenager. Possibly, the curriculum developers think this is the right age for the child to appreciate the otherwise all inclusive subject of statistics.

Harris and Taylor (2009) in a forward of their book *Medical Statistics Made Easy* wrote "A love of statistics is, oddly, not what attracts most young people to a career in medicine and I suspect that many clinicians, like me, have at best a sketchy and incomplete understanding of this difficult subject."

According to the American Statistical Association, Statistics is the scientific application of mathematical principles to the collection, analysis, and presentation of numerical data. Statisticians apply their knowledge of statistical methods to a variety of subject areas, such as biology, economics, engineering, medicine, public health, psychology, marketing, education, and sports.

A more open definition of statistics is given by the department of statistics of the University of Nebraska, Lincoln whose motto is turning data into knowledge to solve real world problems. They define statistics as the development and application of methods to collect, analyze and interpret data. Modern statistical methods involve the design and analysis of experiments and surveys, the quantification of biological, social and scientific phenomenon and the application of statistical principles to understand more about the world around us.

An interesting definition is that statistics is the study of data¹. This implies that a study involving either quantitative or qualitative data is basically statistics.

Exploring the Beauty of the "marriage" between Statistics, computing and Geography by Felix Wamono

Knowledge is shared through many abstract forms. Attempts to articulate and explain human experience and understanding use these abstractions—summaries of a larger body of knowledge. Abstractions, such as text, hieroglyphics, language, mathematics and statistics, music and art, drawings, images, and maps, are used to record and communicate experiences, culture, and history from generation to generation. Digital computing allows the capture and sharing of knowledge across networks such as the Internet. Simultaneously, geographic information system (GIS) technology is evolving and provides better methods to understand, represent, manage, and communicate the many aspects of the earth as a system. Geography has traditionally provided an important framework and language for organizing and communicating key concepts about the world. The next paragraph concisely explains how the cocktail of statistics, computing and geography works to articulate and explain human experience and understanding.

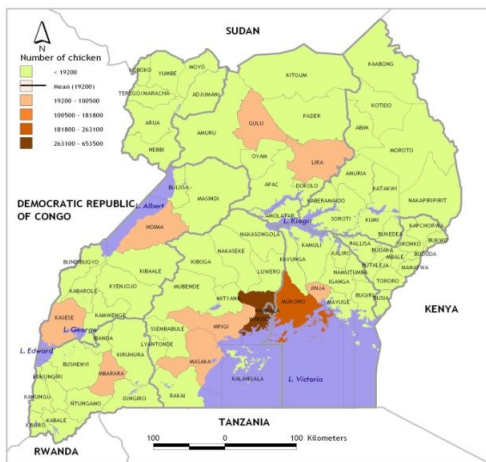
According to the 2008 National Livestock Census; the national chicken flock of exotic broilers for Uganda was estimated to be 1.5 million as at 2008, representing 4.1% of the total chicken flock in Uganda. Regionally, the Central Region had the highest number of exotic broilers estimated to be 1.3 million (79.7%), while the Karamoja zone had the least number of exotic broilers estimated to be 0.002 million (0.15%). In terms of district; Wakiso,

¹

http://en.wikibooks.org/wiki/Statistics/Introduction/What_is_Statistics (accessed on the 6th October 2009)

Kampala, and Mukono districts had the highest numbers of exotic broilers reflecting the affinity of commercial poultry rearing to **urbanization**. The total estimated number of exotic broilers in Wakiso, Kampala, and Mukono were estimated to be 0.65 million, 0.29 million and 0.19 million respectively. The beauty of the marriage between statistics, computing and geography is more succinctly demonstrated using the map below. The map shows the distribution of the total number of exotic broilers by district extracted from the report of the Uganda National Livestock Census 2008. The map pithily demonstrates that commercial poultry rearing-with focus on exotic breeds- is concentrated around **Kampala city and other major regional urbanized districts and/or districts with access to external markets** reflecting the affinity of commercial poultry rearing to **availability of market**. The “**marriage**” clearly led to a more solid conclusion compared to the initial conclusion. Good reading!!!

Many issues arise from these definitions, but I will just conclude without delving into the discussion by pointing out few generic questions. Does statistics imply strictly quantitative data? Hence, is statistics restricted to the study involving strictly numeric data? Is quantification of qualitative data a function of statistics? Thus, is qualitative study independent of statistics? We seem to be getting closer to the definition of this all-inclusive area of statistics, let's watch this space in the next issue of ISAE Newsletter!



A brief from the 26th International Population Conference (IUSSP) – Marrakech – Morocco September 27th to 2nd October 2009 – by Dr. Gideon Rutaremwa

The International Union for the Scientific Study of Population (IUSSP) promotes scientific studies of demography and population-related issues. Originally founded in 1928 and reconstituted in 1947, the IUSSP is the leading international professional association for individuals interested in population studies. The IUSSP network includes over 2000 members world-wide. The IUSSP's main goal is to foster relations between persons engaged in the study of demography, and stimulate interest in demographic matters among governments, national and international organisations, scientific bodies and the general public.

The XXVI IUSSP International Population Conference was held in Marrakech, Morocco. This was the first IUSSP International Population Conference to be held on the African continent and



in an Arab country. The Conference was opened on Sunday, 27 September 2009, and concluded on Friday, 2 October 2009. It included over

180 regular scientific sessions, poster sessions, and training sessions, as well as plenary and debate sessions, side meetings and exhibitions.

The opening ceremony on Sunday 27th September 2009 included a message from His Majesty King Mohammed VI, whose message highlighted issues of population growth, inequality and marginalization of some population groups as well as environmental degradation. Other addresses at the opening ceremony included that by John Cleland

(IUSSP President), Thoraya Obaid (UNFPA Executive Director) and Rima Khalaf Hunaidi (Former Director of UNDP's Regional Bureau for Arab States).

At the Conference, 11 simultaneous sessions were held Monday through Friday, covering a wide range of topics. At the same time five poster sessions with up to 180 posters took place at the conference. ISAE was well represented at this year's IUSSP Conference. We presented two papers in the regular sessions, we made two poster presentations and one of our members was discussant of a session on: "*Improving the Usefulness of 2010 population Census Round*". We had a rare opportunity of having one of our junior staff members: Ms. Olivia Nankinga representing the young population scientists' world over and making a statement at the closing ceremony of the conference.

In another perspective, it is clear that a large majority of authors of papers presented at IUSSP conferences continue to be those of researchers based in Europe and North America. In this context, a look at total number of authors by place of work for all IUSSP conferences held since inception, Uganda ranks 8th in Africa. Obviously our ranking position diminishes on a global scale.

Friends, we have an obligation to make ISAE "*an internationally recognised centre of excellence*" and in our quest to attain this vision, five population scientists from ISAE attended and participated in the 26th IUSSP Conference which we found to be a conference to remember as it was very educative and constructive and we fully represented ISAE in every way possible. We are grateful to the ISAE friends; Makerere University Graduate School, UNFPA, AfDB, and IUSSP for sponsoring our participation and to the population and statistics fraternity for all the support and encouragement.

Readers' Feedback

1) from: jntozi@isae.mak.ac.ug

Dear Agnes,
Congratulations for the successful launch of the first Newsletter and for the innovative idea. I hope we shall keep the momentum, so that we educate ourselves and our stakeholders.

Regards.

James

To our Esteemed Readers,

We want to hear from you. Please send us your feedback, as well as letters and ideas on possible articles for ISAE News letter, and on related Statistical issues, events, publications and personalities. Thank you!

Editor

OBITUARY

It is with deep sorrow that we announce the death of Ms Immaculate Namata who has been Secretary in the Department of Planning and Applied Statistics which occurred on 26 September 2009. Burial took place on 28 September 2009 at Masaka.

"May her soul Rest in Peace"